

Bumper Stickers and Helping Based on Impression Formation

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### Abstract

A well-established tenet of social psychology is that our first impressions matter, and those impressions are often formed using minimal information, such as attractiveness, complexion, and mannerism (Carlston & Schneider, 2015, 95). One area that has not been investigated to date, however, is bumper stickers. In this naturalistic field experiment, we explored the relationship between bumper stickers and helping behavior. Based on previous studies of impression formation, we predicted that the presence of offensive bumper stickers would reduce the amount of help offered to a stranger. Sixty adults entering a large shopping center in Northeast Tennessee were approached at random and asked for directions to a nearby nature center. Subjects were approached by a 20 year old white female standing in front of a parked car covered with 7 hostile bumper stickers (e.g., “Watch out for the idiot behind me”) or the same car covered with 7 neutral bumper stickers (e.g., “Blessed Be”). A total of 30 adults were approached for each condition (neutral vs. hostile stickers) over the course of 6 separate days. A female confederate posing as a seated passenger unobtrusively recorded the following for each encounter: (a) level of detail in the directions given, (b) disposition of the subject, and (c) approximate distance between experimenter and subject. This confederate was unaware of the type of stickers on the car during each encounter and was, thus, blind to the conditions. The stickers were periodically changed throughout the experiment. Statistically significant differences were found for all three dependent variables. As expected, those exposed to neutral bumper stickers were more likely to give detailed directions, be friendlier, and stand closer to the experimenter than those exposed to hostile bumper stickers. Results are discussed in terms of implications and suggestions for further research.

## Literature Review

Imagine walking by a young, Caucasian woman standing next to a car plastered with bumper stickers who is in need of directions to a nearby park. You cannot help but notice that the back of the car is covered with bumper stickers that are neither offensive nor persuasive in any way (e.g., “Hanging with my Gnomies”). This woman politely asks you for help. Would you stop to respond? Suppose the same young woman’s car were covered with negative, offensive bumper stickers (e.g., “If you are looking for your cat, look under my tires.”). Are you still willing to give directions or would you have to think twice about helping this woman? Would the bumper stickers affect your impressions and your behavior? The study being presented in this paper explores this very question.

Turner, Layton, and Simons (1975), conducted one of the few psychological studies involving bumper stickers. In the study, bumper stickers were used as a priming stimulus to explore aggressive driving and helping. They hypothesized aggressive stimuli (including an aggressive bumper sticker) would push the subjects to become more aggressive and thus honk at drivers who failed to respond to a change in stop lights. Findings from this study indicate that drivers are in fact more likely to become aggressive when the car in front of them has a sticker with the word “vengeance”, particularly if there are other aggressive stimuli (rifle in the rear window) and when the driver is not visible. Bumper stickers were not the primary focus of the study, however, so we have no empirical evidence that changing the wording of the sticker would have resulted in less aggression. A replication of this study would be ideal, but is not likely due to safety and liability issues. While literature involving bumper stickers is scarce, there are relevant findings from the literature on impression formation, helping and priming, which can be used to understand how bumper stickers might affect behavior.

## Impression Formation

According to Gordon Marshall (1998), “impression formation is a social psychological term referring to the way in which strangers develop perceptions of each other”. As humans, we start forming impressions of people as soon as we acknowledge them. Any factor that reveals something about a person can shape our impressions, such as dress, appearance and group membership.

A bystander does not know your values or your core personality, he/she only knows what you choose to reveal to them. Dress and how you display yourself physically has shown to have an impact on how people form impressions of you. For example, a study revealed that cosmetics were significantly correlated with the way in which people viewed an individual’s femininity, attractiveness, and morality (Johnson & Workman, 1991). Group membership also plays a role in how we form impressions. Wyers (2010) conducted a study in which she described a person with certain traits and later told the subject the information was wrong and gave new traits. The impressions changed upon learning the new information. Even something as simple as a pair of shoes can affect judgments about income, age, gender, anxiety, and personality according to a study done by Bahns, Crandall, Ge, and Gillath (2012). If a person’s shoes reveal such things about us, it seems reasonable to think that bumper stickers will leave a lasting impression on a passerby as well.

Stereotyping is a special case of impression formation according to Carlston and Schneid (1999). When one of the cues suggests membership in a particular group, stereotypes may be activated about that group, particularly when the cue relates to race, gender, and age. Some believe impression formation and stereotyping mean the same thing, and while some of the

characteristics overlap, there are notable differences. A major difference is the fact that impression formation focuses on the impressions formed of an individual person, while stereotyping focuses more on the impressions formed of an entire group of people. In addition people are more likely to suppress or deny stereotyping more so than impression formation. (Carlston & Schneid, 1999). For example, Carlston and Schneid found that participants in impression formation studies often rated individual people more negatively than they did minority groups. Therefore, we might expect that bumper stickers, which suggest a driver has a particular personality type (e.g., rude vs. nice) will produce more pronounced reactions from other drivers than stickers that activate stereotypes about entire groups (e.g., democrat vs. republican). In the former case, drivers may eagerly show their displeasure (e.g., honking their horn at a distracted driver with a rude sticker), but drivers may hesitate to honk at drivers with a politically charged sticker for fear of revealing a bias toward that group.

## **Helping**

The aim of the present study was to see if different bumper stickers will lead to different levels of helping based on the impressions formed about the owner of the car. According to Piliavin (2009), helping behavior can be defined as “an action that has the consequence of providing some benefit to or improving the well- being of another person” (210). If a bad impression has been formed, then it only makes sense to believe that a person will be less likely to help an individual in need. It is far less likely that someone will be willing to help an unknown individual as opposed to a friend or family member. (Amato, 1990) His research conveyed that only 11 percent and 9 percent of helping was given to complete strangers, the rest of the help given by participants was to people they were familiar with. It is very difficult to gain the trust of a stranger, especially if the helper is being presented with a negative stimulus that will lead

him/her to form a bad impression. Impressions, both good and bad, are also likely to affect empathy, which is a known factor in helping. According to Wilhelm and Bekkers (2010), empathy and the principle of care play a role in how likely someone is to help an individual in need. To put it simply, we help those we feel sorry for.

There are many factors that affect willingness to help strangers beyond empathy. First, gender plays a significant role. According to one meta-analysis of 172 studies, men are more likely to help and women are more likely to receive help (Eagly & Crowley, 1986; Danzis & Romero, 2009). However, gender may be moderated by attractiveness. An attractive woman is likely to receive more help from a male; whereas, a female will be less likely to offer help due to jealousy and comparison. (Danzis, Romero, 2009) Race also plays a role during situations in which an individual needs help. According to Gaertner and Bickman (1971), blacks are relatively equal when given the chance to help whites and blacks; however, whites are far more likely to help other whites as opposed to blacks. Differences in help were also confirmed in a more recent study by Saucier. In their study, “As helping scenarios contained higher levels of various attributional cues that would justify one’s failure to help a target of any race, help was given less often to Black targets than to White targets”(13).

Context plays a role in helping too. Several relevant factors include weather, the time of day, whether or not the situation is an emergency or not, and the time it would take for an individual to provide help. Weather can be one of the deciding factors when an individual is thinking of helping someone in need. A study conducted by Gueguen and Stefan (2013) concluded that males and females were more likely to stop and help someone on a sunny day more so than they would on a cloudy day. The authors’ reasoning behind this was that maybe people’s moods are persuaded by the weather. Perhaps people are happier and more positive on

sunny day than on cloudy days. The time of day is also an important factor to consider when figuring the likelihood of whether or not someone will help an individual in need. In our society we are taught to be afraid of darkness, so the likelihood of helping a stranger in need at night time can be assumed to be slim. While Bogard (2014) did not do a scientific study on helping and time of day, his research about lighting and darkness does support the idea that help is given more during day time as opposed to night time. One must also take into account whether the situation is an emergency or not. When an emergency takes place, instinct kicks in and tells us to help regardless of who it is we are helping. In emergency situations people are more likely to help than in non-emergency situations (FISCHER, GREITEMEYER, POLLOZEK & FREY, 2006; Bhatnagar & Manchanda, 2013) For example, an individual was more willing to help someone that was in a terrible car accident, and less likely to help an individual that had just slipped and fell. Sometimes when one is asked for help, time is of the essence. One must figure out if he/she has enough time to give help to a stranger. If someone asks you for help, and you are already running late for work or running behind schedule to pick up the kids from school, odds are there will not be enough time for you to offer up help to someone you do not even know. On the flip side, if you are an elderly man that never has anyone to talk to and you are asked for directions, it can be assumed that you will be excited to help and spark up a conversation about the subject.

### **Priming**

The impetus to help or harm is no doubt influenced by many unconscious associations, which are activated by priming. For example, Jacob and Gueguen conducted a study in 2012 and found, people are more likely to help individuals when they are presented with altruistic quotes more so than when they are not. Such quotes serve as a primer to activate social norms and

stereotypes. Bumper stickers, likewise, can prime people to act in certain ways. The previously described study by Turner, Layton, and Simons (1975) showed how aggression can be primed by the presence of a single hostile sticker. While the present study did not take into account bystanders, it is important to note that priming is still effective even when bystanders are present (Abbate, Ruggieri, and Boca (2013).

## Conclusion

In conclusion, there is reason to believe that the content of bumper stickers can create an initial impression that will prime associations to either predispose someone to help or not. For example, an individual needs directions and is standing next to a car plastered with bumper stickers, such as “Watch out for the idiot behind me” and “I’m not mean, you’re just a sissy”. It is likely that people will associate the presence of these negative stickers with hostility, danger, or at least rudeness. This, in turn, will lead them to be less empathetic, more wary of approaching the stranger, and less willing to help. Take the same example, but assume the bumper stickers say things such as “Blessed Be” and “Be ready, be buckled”. These stickers will create a very different impression and prime associations of safety, kindness, and respect. People will be more sympathetic and willing to help the driver because they have formed a neutral or even positive impression about him/her. This very scenario was tested in a naturalistic field experiment. Specifically, we predicted that individuals passing by a vehicle with a collection of 7 hostile bumper stickers would be significantly less helpful and cautious than when approached by the same person standing in front of a car with 7 neutral/safe bumper stickers. The major dependent variables were: (a) level of detail given in the directions, (b) physical distance between the driver and helper, and (c) disposition of the helper as measured by a subjective rating of body language and facial expressions.

## Methods Section

### Design and Procedure

This study was a naturalistic field experiment involving a between subjects manipulation of two conditions (negative bumper stickers or neutral bumper stickers; see Appendix A). The study was carried out at a couple of different shopping centers in Johnson City, Tennessee, over several days during November. A black Honda civic was parked in a parking space along an aisle leading up to a store in such a way that the stickers were always visible to people approaching from either direction in the aisle. A Caucasian woman in her 20s dressed in casual winter clothing stood beside the car, with a map laid across the trunk, and a co-experimenter sat inside the car with the windows rolled down in order to hear the conversations taking place to record data. When a subject walked past the car, the experimenter asked “excuse me, do you know directions to get to Bay’s Mountain Park?” This park is a familiar attraction to most residents of Johnson City. Judging by the subject’s reaction, data was recorded by a co-experimenter sitting inside the car with the windows rolled down. Variables that were recorded included: a) the amount of directions given, b) the physical distance between the participant and experimenter, c) the disposition of the participant, d) demographics , (gender, age), and e) apparent awareness of the stickers. Appendix B contains the form used to record these variables. The sticker conditions were changed out periodically. The experimenter flipped a coin to see which bumper stickers to place on the back of the car first, stickers were changed every 30 minutes. The co- experimenter was unaware of which stickers were on the car to eliminate biases.

A total of 60 people participated in this IRB- approved study. Participants were randomly selected as they approached the entrance of the shopping center. An equal number of people were approached for each condition. Given the innocuous nature of the study, participants were not told they were taking part in a study and were not debriefed after they walked away. This part of East Tennessee is 86% Caucasian and thus, 51.6% of the participants were Caucasian. (Quick Facts) The ages of participants ranged from early 20s to at least 60. A total of 33 men and 27 women were approached.

### Results

There was a significant difference between the neutral bumper stickers and the hostile bumper stickers on helping in regards to depth of directions given,  $B$ . When exposed with neutral stimuli, subjects were more likely to give directions, ( $M = 1.24, SD = .99$ ), than when exposed to negative stimuli, ( $M = .76, SD = .79$ ).

There was also a significant different between bumper stickers on how close individuals would stand to the experimenter,  $t(56) = 2.47, p = .02$ . When exposed to neutral bumper stickers, subjects stood closer to the experimenter, ( $M = 1.97, SD = 1.12$ ), than when exposed to negative bumper stickers, ( $M = 1.31, SD = .89$ ).

Finally, there was a significant difference between groups on the disposition of subjects, ( $56) = 4.15, p < .001$ ). When exposed to neutral bumper stickers, subjects were rated by the co-experimenter as appearing friendlier and more comfortable, ( $M = 4.07, SD=.46$ ), than when exposed to negative bumper stickers, ( $M = 3.27, SD = .92$ ).

## Discussion

This naturalistic field experiment was carried out in hopes of finding a significant relationship between bumper stickers and helping behaviors. By manipulating the way individuals formed impressions of me, I was able to find a significant difference in how willing people were to give helpful directions. I also found that individuals were more likely to stand in closer proximity to me when shown neutral bumper stickers as opposed to negative, hostile stickers. Disposition was seen to be significant in that subjects appeared to be friendlier and more comfortable when exposed to neutral bumper stickers more so than when exposed to negative stickers.

The most obvious conclusion from our study is that bumper stickers must be used with caution! First, the present study confirms that bumper stickers affect how others treat us in a very realistic way. An abundance of research shows that impressions matter when it comes to helping and harm. Good impressions can lead someone to offer a helping hand or a friendly smile; however, bad impressions can lead to more severe consequences. According to Leslie Haynsworth (2008), there are accounts of people being pulled over, ticketed, and harassed by cops for the so called “leud” stickers posted on their car. There are also accounts of people losing their jobs and being harmed over the stickers on the back of their cars. These anecdotal stories might be written off as examples of extreme reactions, but our findings suggest that ordinary citizens can be influenced to behave in more or less prosocial ways too.

Second, we must be careful because for most drivers on the road, that sticker is the only thing that defines us. Our results suggest that people responded differently to the same person based on a very small amount of information. Someone who puts a sticker on their car to express

individuality or a momentary opinion, may soon forget that it is displayed for all the world to see. With no additional information to judge us by, drivers may project all kinds of stereotypes on us and this could result in displaced frustrations. For example, a sticker that humorously hints at a dislike for cats may be generalized to someone who is cruel to all animals. If this owner of the car with such a sticker is our friend, we know they aren't cruel, but we have no additional information for the stranger behind the wheel in front of us. The blank slate of our character and personality is likely filled by the stickers we choose to display. So, if someone wants to use a bumper sticker to identify their car in a crowded parking lot, it might be reasonable to suggest they choose a neutral sticker rather than an obviously offensive one.

Finally, there is a lot more we need to know about this topic. There has been little to no research involving bumper stickers and none, that we know of, on the role of bumper stickers and helping. Our findings indicate that this may be a very fruitful line of research. We were pleasantly surprised to achieve significant results with this relatively simple method and small sample, which indicates a robust effect. However, our findings may be unique to this small sample, so we suggest the study be replicated. Future research should also manipulate factors that may contradict or enhance the priming effects of the bumper stickers, such as style of dress and socioeconomic status of the person asking for help. One could also explore bumper stickers through non-experimental methods, such as surveys or observational studies. There are really no limits to the kinds of studies that can be done on this topic.

A possible limitation to this study could be the bias of the co-experimenter. While the experimenter did not let her see which bumper stickers were being put on the car, it is naïve to assume that she did not figure out which stickers were being displayed at some point throughout the experimenting process. To get more accurate results, I would suggest a replication be done in

which the co experimenter, as well as the experimenter, are unaware of which stickers are being presented to eliminate any kind of biases toward the findings. Future research should also take include the bystander effect, making it one of the variables being tested.

Appendix A



Figure 1. A photo of neutral bumper stickers that were displayed amongst subjects.



Figure 2. A photo of negative bumper stickers that were displayed amongst subjects.

## Appendix B

<b>ID #:</b>	<b>Location</b>			<b>Condition: ___ Neg ___ Neutral</b>	
	<b>Time:</b>				
<b>Directions</b>	Unsolicited Advice	No idea/Don't Know	Vague Directions	Very Detailed	Use of Map
<b>Chalk Line</b>	Kept walking	Behind (distant)	Parallel	Over (close)	
<b>Disposition</b>	Indifferent	Overly Friendly	Friendly	Wary	Hostile
<b>Time</b>					
<b>Gender</b>	Male	Female			
<b>Age</b>	18-30	30-60	60+		
<b>Race</b>	Caucasian	Black	Hispanic	Other	
<b>Sticker Awareness</b>	Definitely Noticed	Probably Noticed	Not Sure	Probably Didn't See	
<b>Comments</b>					

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