

Running head: JUDGMENTS OF SAFETY, MORALITY, AND ATTRACTIVENESS

Judgments of Safety, Morality, and Attractiveness Based on Exposure to Photographs: Are There Differences Based on Severity of Criminality?

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Abstract

This study tested whether or not people are able to make accurate judgments on such characteristics as morality, safety, and attractiveness by showing participants a series of photographs of individuals on an on-line questionnaire. After viewing the photograph, participants rated the photos according to the specified characteristics on a 1-7 Likert scale. Thirty photographs of individuals who had been arrested were gathered, committing crimes such as driving under the influence, robbery, and rape. Participants also rated the severity of each crime. It was expected that the participants, by viewing these photographs, would be able to differentiate between the crimes and rate the individuals accordingly in terms of the specified characteristics. Results indicated that although the crimes were distinguishable between the ratings for the characteristics of morality, safety, and attractiveness; however, these ratings did not correspond with the participants' ratings of crime severity. It is believed that this study is important because the brief judgments people make on the characteristics of others may influence their later interactions and potential relationships with these people. If someone has only a short time to make a judgment about another person, it is important to know if this judgment can be trusted.

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In today's society, we come into contact with a great number of people on a daily basis, in a wide variety of situations. Sometimes we know these people, and sometimes we don't. We rely on others to perform a service, take our money, even watch our children. In these interactions, there is a great deal of faith put into these other individuals; we often do not have enough time to thoroughly screen them before entrusting them with various tasks. In these cases, all we have is the briefest of moments to make judgments about them, oftentimes on little more than their physical appearance. As such, it is essential that these judgments are accurate.

Previous research has demonstrated that people are able to make trait judgments about individuals simply by viewing their faces (Berry & McArthur, 1985; Buckingham et al., 2006; Richell et al., 2005; Winston, Strange, O'Doherty, & Dolan, 2002; Zaidel, Bava, & Reis, 2003). Much of this research has stemmed from observations of researchers as to the influence perceptions of faces can have in social interactions. Oftentimes we enter into such interactions without the luxury of having a long period of time to form educated judgments about the other people in these circumstances. Fortunately, we are at least better equipped for these situations because of our ability to make such judgments. Zaidel et al. (2003) demonstrated that information derived from viewing faces can provide valuable information for successful social interactions.

While interesting that people can make these judgments about the character of others based solely on viewing a photograph, this information would not be significant if these judgments were not accurate. MacLin and MacLin (2004) investigated this further and found that these judgments indeed were accurate. Theirs was a face-rating study comprised of 200 mug

shots, 100 of which were deemed to have high criminality and 100 of which were deemed to have low criminality (as determined by independent judges). Participants were able to successfully make judgments that corresponded to the level of criminality of the individual. In this study, the faces of the highly criminal individuals were rated as less attractive, more distinct, and more memorable. The questions that our research sought to answer focused on judgments of safety, morality, and attractiveness people were able to make based on exposure to photographs. We were interested in investigating whether people could determine the severity of criminal behavior of individuals by simply viewing their faces in photographs. Additionally, we looked at what criteria people were using to make these judgments.

Because in reality we sometimes do not have very long to judge an individual before engaging in social interaction with them, it is important that we can make these trait inferences relatively quickly. Research has demonstrated that confident judgments can be made upon viewing faces in less than one second (Bar, Neta, & Linz, 2006; Willis & Todorov, 2006). In our study, we are looking at some characteristics such as morality and safety, and if these judgments are made too late or are incorrect, some harm could potentially come to the individual making the judgments. Bar et al. (2006) found that people's initial judgments can assist in their survival and interactions with their surrounding environment. In their study, first impressions of photographs were made after as little as 39 milliseconds. These impressions, however, pertained more to personality than temporary emotional states (such as anger). Additionally, participants were less consistent when making judgments about traits such as intelligence than survival-related traits, indicating that our visual system has evolved in such a way that we can detect face information pertaining to threat judgment more quickly. Willis and Todorov (2006) reported that judgments made after a 100 millisecond exposure to a photograph were sufficient to make an

impression on the viewer. They found that while increased exposure time did increase the viewer's confidence in his or her judgment, it did not change the initial perception. This relates to our study in that we were also interested in getting the first impression of the viewer, and this research indicates that the first impression is sufficient and participants do not need an extended period of time to think about their judgments.

Although these judgments can be made quickly, that is not to say that the process is simple. A great deal of neural processing goes into the formation of these perceptions (McClure et al., 2004; Richell et al., 2005; Winston et al., 2002). This research is interesting because it illustrates that the processes behind forming these quick judgments are not simple and superficial. There are areas in the brain, such as the amygdala, that allow people to make automatic judgments of others (Winston et al., 2002). This is very beneficial because it is necessary to make split-second, automatic judgments of people in certain situations.

We wanted to investigate whether people could make accurate judgments of the traits of criminals based on viewing their photograph. Taking into consideration previous research in this area, and particularly the findings of MacLin and MacLin, we expected that participants would be able to successfully differentiate between those individuals who had been arrested of the crimes of rape, robbery, and driving under the influence and rate them accordingly in terms of their relative morality, safety, and attractiveness.

To test this hypothesis, we collected mug shots of individuals arrested for rape, robbery, and driving under the influence. We then presented these photographs to participants, without indicating these individuals' crimes or even that they were criminals at all. The participants rated the photographs on how moral, safe, and attractive the individuals appeared to be. Additionally, participants indicated how severe they thought each crime was, on a 7-point Likert scale.

Method

Participants

Participants of this study were obtained by their response to a link to the experiment posted on a popular webpage for on-line psychological experiments. There were a total of fifty-one participants, ranging in age from fifteen to fifty years old, with a mean age of 26.6 years. Of the participants, 76% were female, while 24% were male. Regarding the participants' ethnicity, 80% were Caucasian, 4% were Asian, 4% were Native American, 2% were African American, and 2% were biracial. However, 8% of the participants did not specify their ethnicity.

Materials

For this study, thirty mug shots were collected from the website www.mugshots.com, which contains mug shots of real people or drawings of real people who have been arrested for certain crimes. Mug shots within this website vary from famous celebrities to average, everyday individuals. Photographs were selected from three different categories of crime: rape, driving under the influence, and robbery. Photographs for each category were selected by the researchers based on the clarity of the photo and the ability to see the entire face. Pictures that were blurry and did not show the entire face were not used. Within each of the three categories, there were twelve rapists, six DUI's, and twelve robbers. Each photograph was in color and varied in size. Each mug shot depicted a person from the shoulders or the middle of the neck to the top of the head. Of the photograph viewed by participants, four were of females and twenty-six were of males. Approximately twenty-three of the photographed individuals were Caucasian, five were African American, and two were Hispanic. Using the image-editing program Photoshop, the words www.mugshots.com on the top of each photograph were removed.

Participants viewed the mug shots one at a time and rated the person in each photograph on dimensions of dangerous-safe, immoral-moral, and unattractive-attractive. Participants rated each characteristic on a Likert scale ranging from 1 (does not possess the trait) to 7 (highly possesses the trait).

Participants also rated the severity of each of the three crimes. The crimes of rape, robbery, and driving under the influence were all rated in terms of severity using a Likert scale ranging from 1 (not severe) to 7 (very severe). Severity ratings of each crime were collected in order to compare the participants' perceptions of the individuals in the mug shots with the actual crime they were arrested for. Researchers wanted to see how the different characteristic ratings of the mug shots correlated with the participants' severity ratings of the crimes.

Procedure

The experiment was posted and administered online. Each participant viewed an informed consent form before beginning the experiment and clicked a hyperlink to indicate their informed consent to participate. They viewed pictures of thirty individuals and rated each individual on the dimensions listed above. After all thirty photographs were viewed and rated, the participants were debriefed.

Results

At the end of the survey, participants were asked to rate the severity of rape, robbery, and DUI on a 7-point Likert Scale. A within-subjects ANOVA for crime indicated that rape ($M = 6.67$) had significantly higher severity ratings than robbery ($M = 5.18$) and DUI ($M = 5.53$, $p < .001$), but severity ratings for robbery and drunk driving were not significantly different ($p = .12$). Thus, participants considered rape to be significantly more severe than robbery or drunk driving.

Participants' ratings of the individuals in the mug shots were analyzed using a within-subjects ANOVA for crime (rape, robbery, and DUI). Results indicated that attractiveness of the criminals differed significantly across crime, $F(2,100) = 10.548, p < .01$, as did morality, $F(2,100) = 17.653, p < .01$. However, participants' ratings of safety did not differ significantly across crime, $F(2,100) = 2.525, p = .085$. The pattern of these results is discussed below in the context of participants' severity ratings.

Immoral-Moral

When comparing ratings of morality, those arrested for rape were viewed as significantly more moral than those arrested for DUI, $F(1,50) = 21.468, p < .01$, and robbers were also viewed as significantly more moral than those arrested for DUI, $F(1,50) = 23.306, p < .01$. Figure 1 presents the mean severity ratings across the different types of crime in comparison to the mean ratings of morality for each crime. It is evident that participants viewed rape as the most severe ($M = 6.67$) yet when viewing the photographs of the rapists they indicated them as appearing to be the most moral, ($M = 3.82$). These results show an inconsistency between the participants' view of the crime itself and the person who actually commits the crime.

Dangerous-Safe

Figure 2 presents the mean severity ratings along with the mean ratings of safety for rape, DUI, and robbery. The rapists in the photographs were viewed as the least safe ($M = 3.73$) which, unlike their rating of morality, was consistent with the participants' belief of rape as the most severe crime. Robbers, on the other hand, were depicted as the most safe, ($M = 3.87$). When viewing photographs of robbers, participants were consistent in their severity and safety ratings. According to the results, rapists were viewed to be significantly more dangerous than robbers, $F(1, 50) = 6.824, p = .01$.

Unattractive-Attractive

Attractiveness was the third domain in which participants rated each photograph. As shown in Figure 3, the criminals arrested for DUI were viewed as the least attractive ($M = 2.58$) and the robbers were viewed as the most attractive, ($M = 2.90$). Pair-wise comparisons between these means confirmed a significant difference between attractiveness of those arrested for DUI and those arrested for robbery, $F(1,50) = 20.636, p < .01$. Also, attractiveness of those arrested for DUI and those arrested for rape was significantly different, $F(1, 50) = 8.64, p = .005$. An inconsistency is evident in these results since robbers were viewed as the most attractive, but their crime was rated as the second most severe.

Discussion

According to the results, participants considered rape to be the most severe crime, followed by driving under the influence and lastly, robbery. It was then thought that participants' ratings of attractiveness, morality, and safety would then follow in the opposite direction, with rapists being rated as the least moral, safe, and attractive; and robbers being rated as the most moral, safe, and attractive. However, the results did not fit this pattern. From simply viewing the unlabeled photographs, participants rated rapists as being highly attractive and moral. Although participants did distinguish among the crimes, being that the three crimes were significantly different in ratings of morality and attractiveness; the participants' ratings of morality, safety, and attractiveness were inconsistent with their own ratings of severity. For example, the rapists in the photographs were rated as being most attractive. Correspondingly, a study by Zaidel et al. (2003) suggested that photographs of attractive people were rated higher in terms of trustworthiness. Because the rapists were rated as being highly attractive, it would fit that they were also viewed as being highly moral because trustworthiness is often considered to

be a component of morality. Likewise, according to the National Crime Victimization Survey from the U.S. Department of Justice, in 2005 73% of rapes and sexual assaults are committed by non-strangers or people that are normally trusted by the victims. Therefore, those in our photographs who were accused of rape may have been generally attractive and trustworthy people.

The photographs of criminals arrested for driving under the influence had the lowest scores for all three characteristics. Many individuals in these photographs appeared palpably intoxicated, usually having somewhat distorted facial expressions. The intoxication probably causes the individuals to look unattractive because they look unwell. Also, because the individuals arrested for driving under the influence were obviously still intoxicated, participants were probably aware of the crime they committed, swaying their ratings of these individuals.

Although participants did distinguish among the crimes, they did not take a strong position on their ratings. The midpoint of our scale was three and almost all of the ratings fell very close to this number. Perhaps, the individuals in the photographs did not look different enough from each other or the average person for participants to differentiate between. Additionally, it possibly would have helped if crimes with a broader range of criminality had been chosen. Participants may have not taken a strong position because the levels of criminality were too close to distinguish a difference. Also, they could feel that the act that was committed is easier to judge than a person especially if they know that person.

For future studies on this topic, researchers need to be aware that, although convenient, mugshots.com may not be the most reputable source. There was no review of the website, therefore no way of knowing the true legitimacy of the website. The crimes of the individuals may not be accurately labeled; or, some of the individuals may not have been criminals at all, but

simply posing as one. For some of the pictures, such as the driving under the influence photographs, many participants were completely aware of the crime of the individual they were viewing, which possibly skewed results. It is suggested that mug shots be taken from a more reliable source, such as government agencies, to ensure that the photographs are of good quality and are of true criminals. For example, the researchers in MacLin and MacLin (2004) retrieved their photographs from a local police station.

In total, the results seem to indicate that participants were not able to connect their ratings of crime severity to their ratings of people accused of those crimes. Again, the crime considered the most severe (rape), was also rated as the most attractive and most moral. It seems that automatic judgments of individuals, especially those involving the “goodness” of individuals, are not always right. People definitely are not always what they seem, and this study is an excellent illustration of that fact.

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Figure 1: Comparisons of Severity Ratings across Ratings of Morality

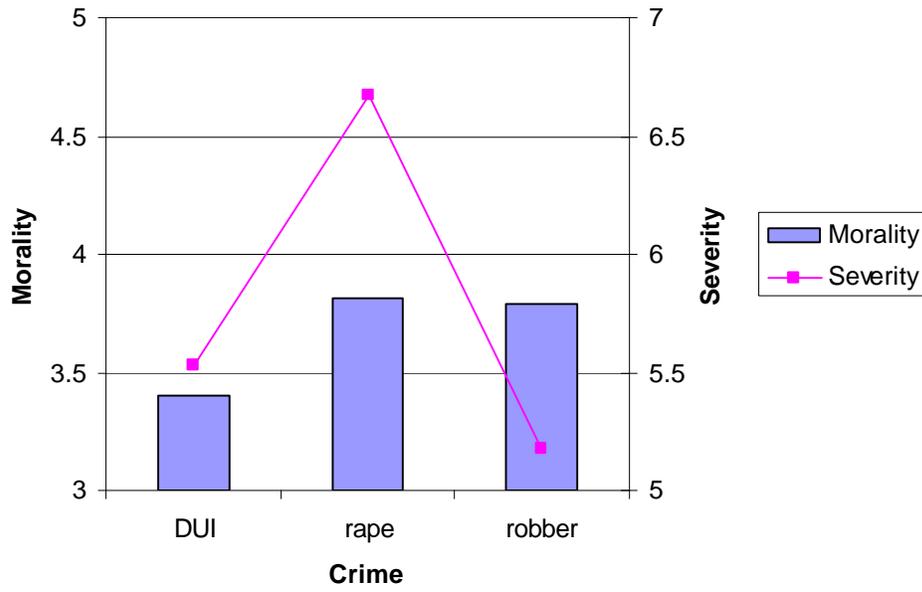


Figure 2: Comparisons of Severity Ratings across Ratings of Safety

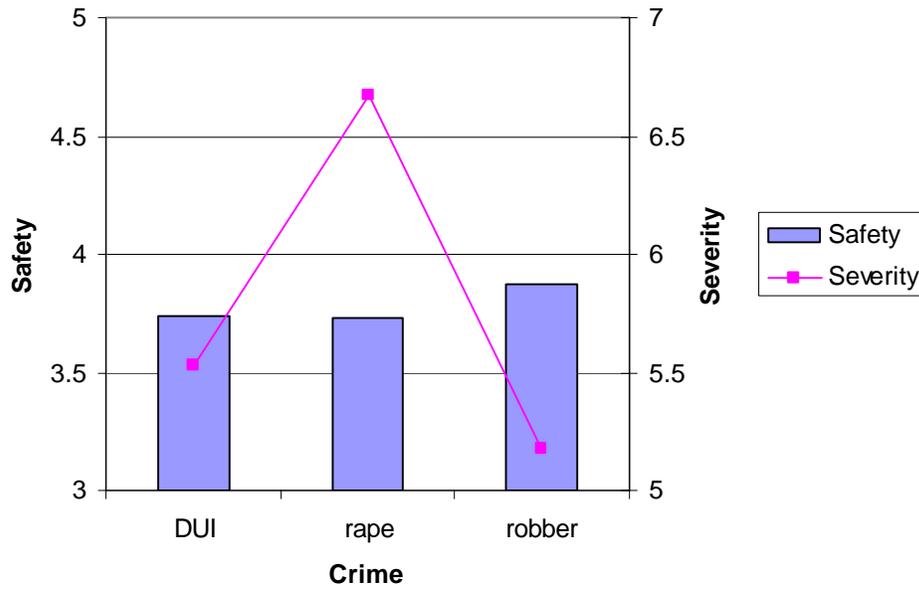


Figure 3: Comparisons of Severity Ratings across Ratings of Attractiveness

