Personality Trait's Influence on Priming Helping Behavior

An essay submitted in partial fulfillment of

the requirements for graduation from the

Honors College at the College of Charleston

with a Bachelors of Science in Psychology.

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May 2013

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Abstract

This study serves as one of the most comprehensive studies to date to examine interactions effects between Big Five traits and priming effects, in the context of prosocial behavior. We examined whether personality traits, specifically conscientiousness and agreeableness, moderate the influence of a help elicited prime in the prediction of self-reported helping behavior. A sample of 203 participants was recruited from introductory psychology courses at the College of Charleston. After participants responded to the NEO-FFI Personality Inventory, the Marlowe-Crowne Social Desirability Scale, and a helping questionnaire that was developed to assess pro-social responses to different real-world helping scenarios, we examined the correlations of both Conscientiousness and Agreeableness with four different outcome variables: self-sacrifice, provision of individual assistance, volunteering and social responsibility. Results showed when participants were primed to think about elements related to a superhero, individuals who were high in agreeableness and high in conscientiousness were more likely engage in self-sacrificing helping behavior. These findings show that priming positive moral behavior is possible and some individuals may be more affected by this priming than others.

Introduction

For years researchers have been fascinated with the phenomenon of the bystander effect. This effect suggests that the greater the number of people present during an emergency, the less likely an individual will help someone in distress (Latane & Darley, 1968). One explanation that has been offered in the literature to explain this is the process of diffusion of responsibility, which occurs when individuals in a group feel less responsible to help because they assume others will probably provide assistance (Garcia et al., 2002). Also, associated with the bystander effect is the idea of pluralistic influence, which is the behavior of looking to others to evaluate the situation. When others are not reacting to the situation or acknowledging the emergency, then a bystander is less likely to act upon the situation. Lastly, the concept of diffusion of responsibility idicates that people may not help because, in the presence of others, they do not want to be blamed for the incident (Latance and Darby, 1968).

The fascination with the bystander phenomenon has led many researchers to examine ways to possibly overcome inhibitory factors to helping behavior. Studies have that shown that by enlisting knowledge structures, one can significantly affect social perception and behavior. One way to do this is through priming, which activates semantic knowledge associated with a certain concept. Once activated, this information may influence behavior directly or indirectly.

Previous research conducted by Greitemeyer & Osswald (2010) demonstrates how priming can influence behavior directly by examining pro-social video game's priming effects on helping behavior. There were series of three experiments that measured different helping behaviors, including spontaneous helping after a mishap, assistance in further studies, and helping a harassed woman. After randomly assigning participants into either the neutral, aggressive, or pro-social video game prime condition, Greitemeyer & Osswald found that pro-

social priming influenced the three types of behavior measured. Examining how priming can influence behavior indirectly, Nelson & Norton (2005) used various priming techniques to manipulate participants' engagement in future helping behavior. Participants were primed to think of a superhero and asked to list qualities and behaviors that come to mind when thinking of a superhero. After the experiment, the participants were asked to email contact information if they were interested in volunteering in a Princeton Community Tutoring Workshop. Three months after completing the experiment, these students were contacted and informed of informational meetings to start their participation in the workshop. Results of this study showed that participants who were primed with the superman condition were more likely to participate in the tutoring workshop, demonstrating the superhero prime's ability to indirectly facilitate future helping behavior.

With the knowledge that priming does indeed influence helping behavior, some researchers have examined other factors, such as the influence of personality on helping behavior. For example, Zaccola et al. (2011) conducted two experiments looking at whether the tendency to experience embarrassment could predict helping behavior. In study one, which assessed a behavioral measure, participants were given the chance to tell the experimenter she had ink on her face, with some participants knowing she had an interview after the experiment or in the presence of a confederate. Results from study 1 showed that those higher in embarrassment were less likely to help. In study 2, which measured self-reported behaviors, participants were given a questionnaire asking about instances in which they pointed out a flaw during an interaction with another person. Results from study 2 were consistent with study 1 in that those participants who were higher in embarassability reported less behavior.

Because behaviors are often influenced by multiple personality traits, King et al. (2005) examined how Big Five personality characteristics, such as agreeableness, conscientious, extraversion, and emotional stability, interacted to predict helping behavior. King et al. surveyed a sample of 374 women through a 60-item personality questionnaire assessing Big Five character traits. Their work supervisors were then asked to rate their degree of helping behavior that looked at multiple dimensions of organizational citizenship. Results showed that for the three moderator traits (agreeableness, extraversion, and emotional stability), when the trait was high, the relation between conscientiousness and helping was positive, while it was negative when the moderator trait was low.

Pro-social behavior was examined by Ferguson (2004), who linked personality factors to blood donor behavior. In his study, 630 donors were surveyed about past donor experiences, such as frequency and recency of donation, and surveyed to assess personality traits. Results of this study support the hypotheses that the personality domain of conscientiousness is linked to increased levels of blood donation, which was Furgeson's measure of prosocial behavior, especially for male donors who have been donating for a longer period of time. For female donors, the personality domain of emotional stability was the main predictor, and again this was especially the case for female donors who have been donating for a longer period of time.

Clearly, personality factors are associated with helping behavior. What is less clear is whether personality may moderate the influence of a helping prime. Recent research has shown that personality influences one's susceptibility to a prime. For instance, Meier et al. (2006) conducted an experiment looking at the ability of agreeableness to moderate aggressive priming cues on behavior. Study 1 assessed a sample of 91 undergraduate students through a 20-questionnaire measuring agreeableness, and then randomly assigned to the aggression-related

prime condition or the neutral prime condition. In the aggression-related prime condition, participants were ask to choose words that had the closest meaning to a series of aggression related words, such as torture and slash. The participant's aggressive behavior was then measured through a fake competition where they were asked to press a button whenever he or she heard a particular noise over his or her headphones. Results from study 1showed that priming with aggression-related words increased aggressive behavior, but only among individuals low in agreeableness. Study 2, which assessed a sample of 99 undergraduate students, showed that aggression-related cues activated pro-social thoughts among individuals high in agreeable affect.

The goal of our current study was also to examine the complex interactions between the Big Five personality traits and a help-eliciting prime in the prediction of different forms of helping behavior. This study serves as one of the most comprehensive studies to date to examine interactions effects between Big Five traits and priming effects, in the context of prosocial behavior.

Method

Participants

A sample of 203 participants was recruited from introductory psychology courses at the College of Charleston. The sample included approximately 146 females and 51 males, with 85.7% of the sample being Caucasian, 16% African American, 3% Hispanic, and 3% Other. The students were offered insitutuional credit for participating in the study. Of the original sample, three participants did not participate in both sessions of data collection, and were thus lost to attrition.

Materials

In the first round of data collection, the following questionnaires were administered to the research participants using a 5- point Likert Scale: the NEO-FFI Personality Inventory, the Marlowe-Crowne Social Desirability Scale, and a helping questionnaire that was developed to assess pro-social responses to different real-world helping scenarios. The conscientiousness and agreeableness subscales were assessed in the NEO-FFI Personality Inventory. The agreeableness subscale had an alpha level of .65, the conscientiousness subscale had an alpha level of .81, and the social desirability subscale had an alpha level of .92. In the second round of data collection, participants were administered a sheet of paper to write down the characteristics that come to mind when they think of a superhero, if they were assigned to the help-prime condition, or write down the characteristics that come to mind when they think of a college dorm room, if they were assigned to the neutral-prime condition. After the priming task, participants were asked to respond to a variety of helping scenarios. The helping scenarios measured both short term helping behavior, such as offering one's seat on the bus to an elderly woman, and long term helping behavior, such as volunteering to be a tutor in the college writing lab. The scenarios were further categorized into four different variables of helping: self-sacrifice, provision of individual assistance, volunteering and social responsibility.

Procedure

To ensure that the assessment of personality did not influence participant's responses to the priming manipulation, the study was divided into two parts, which were separated by a one week interval. At the beginning of the first session, participants were given an envelope with there name and a subject identification number, and told that this number will be used to track their participation in the study and so that their extra credit could be recorded accurately. Then,

the participants were given a packet of questionnaires measuring personality characteristics, and told that all answers would be kept confidential. Upon completion of the questionnaires, the participants exited the room and handed their research materials to the assistant outside the door. The following week, small groups were randomly assigned to one of the following conditions: the Superhero condition or the Control condition. In the Superhero condition, participants were asked to think of a superhero and list the behaviors, values, lifestyle, and appearance associated with a superhero. For the control condition, participants were asked to list the characteristics and objects that come to mind when you think of a college dorm room. After completing the priming manipulation, participants were asked to respond to a series of scenarios, some of which assessed helping behavior

Data Analysis

Using hierarchical regressions, we examined the correlations of both Conscientiousness and Agreeableness with four different outcome variables: self-sacrifice, provision of individual assistance, volunteering and social responsibility. We controlled both sex as well as social desirability, because individuals may be drawn to present themselves in a more positive light in the context of helping behavior. Main effects for Conscientiousness and Agreeableness, two-way interactions between Prime x Conscientiousness and Prime x Agreeableness, and three way interactions between Prime x Conscientiousness x Agreeableness were all examined in relation to each of the above outcome variables.

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Results

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In our first analysis, agreeableness ($t = 3.43$, $p = .001$) and conscientiousness ($t = 2.42$, $p = .16$) were both found to have significant effects on self-sacrifice. A significant two-way interaction between the Prime x Conscientiousness was found ($p = .000$). A significant three-way

interaction between our Prime x Conscientiousness x Agreeableness was also found (p = .051). This means that when participants were primed to think about elements related to a superhero, individuals who were high in agreeableness and high in conscientiousness were more likely engage in self-sacrificing helping behavior (see Figure 1). At the same time, individuals who were low in agreeableness and low in contentiousness were least likely to engage in self-sacrificing helping behavior. When participants were primed to think about elements related to a college dorm room, individuals who were high in agreeableness and high in conscientiousness were also more likely to engage in self-sacrifice, but the level of helping was lower than that of the experimental group showing that the prime increased the likelihood of the helping behavior of self-sacrifice.

Our second analysis examined Contentiousness and Agreeableness in relation to the provision of individual help. There was a significant main effect found for agreeableness (p = .043), but not for contentiousness. While there was a significant two-way interaction between Agreeableness x Conscientiousness (p = .002), there was no significant three-way interactions between the Prime x Agreeableness x Conscientiousness. This means that those individuals who were high in agreeableness and high in conscientiousness were more likely to engage in this type helping behavior, but there was no significant difference between individuals in the superhero priming condition and the college dorm room prime condition (see Figure 2).

Analysis examining volunteering and social responsibility showed only a significant main effect for Contentiousness (p = .000, p =.052) , with no significant two-way or three-way interactions with the priming variable.

Discussion

This study serves as a comprehensive examination of Big Five personality traits' moderational effects on situational primes in the prediction of different forms of helping behavior. Our self-sacrificing variable was measured with a question regarding a decision to either attend a last minute concert of a great musician, or to keep a promise and spend the evening with a close friend recovering from surgery in the hospital. Results showed that participants who were primed to think about elements related to a superhero, and who were high in agreeableness and high in conscientiousness were more likely engage in this self-sacrificing helping behavior. Although there was no difference shown when priming for helping behavior, individuals who were high in agreeableness and high in conscientiousness were more likely to engage in provisions of individual helping behavior. Provision of individual help was measured using questions regarding giving up one's seat on a crowded bus and helping and elderly man who had fallen down.

These findings show that individuals are suggestible, which can have great implications on society as a whole. Although history has focused on rather negative outcome of suggestibility, such as the Nazi takeover in Germany during the Holocaust, society must embrace the notion that individuals can be primed to behave morally and ethically as well. For example, Charles-Sire (2012) found that the number of blood donors increased when solicitor- confederates wore a T-shirt that read Loving = Helping, compared to the no inscription condition. This simple technique can be adopted by many different organizations to solicit donations for charities, even if just writing a suggestive word on the front of envelopes of donation requests.

Because conscientiousness and agreeableness were both found to have the greatest effect on helping behavior, efforts should be made on a societal level to foster more conscientiousness

and agreeableness individuals. Education on benefits of regular yoga and meditation, as well as application of the practice of yoga to everyday loves, may be able to change levels of conscientiousness. Becoming more mindfully aware of your environment through meditation may then translate into becoming more agreeable in nature. The more individuals hold these values and characteristics, the more harmonized and nurturing our society will become.

Although we did find significance in our results, our sample was not representative of the entire population, with white females overrepresented. Females are socialized to be more nurturing and caring, which could have influenced our results by encouraging their self-reported answers to be more prosocial from the beginning. Efforts should be made in future studies to recruit more males of various nationalities to allow findings to generalize to the larger population. Future studies should also look at behavioral measures of helping behavior, rather than just self-reported behavior.

In conclusion, this study examined whether personality traits, specifically conscientiousness and agreeableness, moderate the influence of a help elicited prime in the prediction of self-reported helping behavior. Results showed when participants were primed to think about elements related to a superhero, individuals who were high in agreeableness and high in conscientiousness were more likely engage in self-sacrificing helping behavior. These findings show that individuals are suggestible, which can have great implications on society as a whole priming positive moral behavior, such as blood donation.

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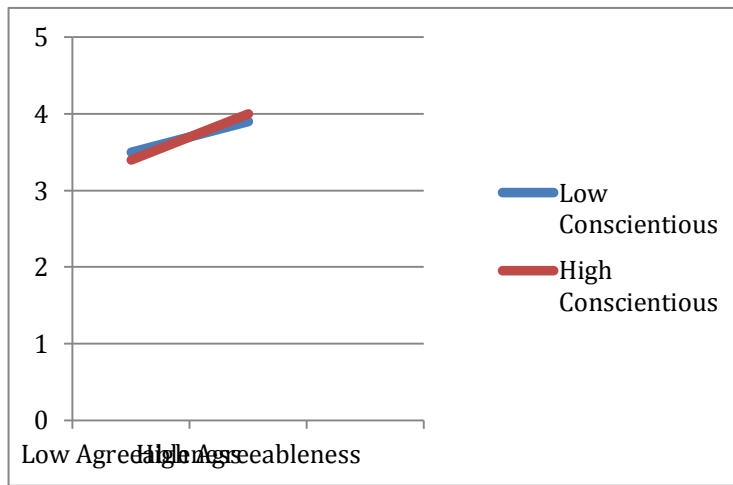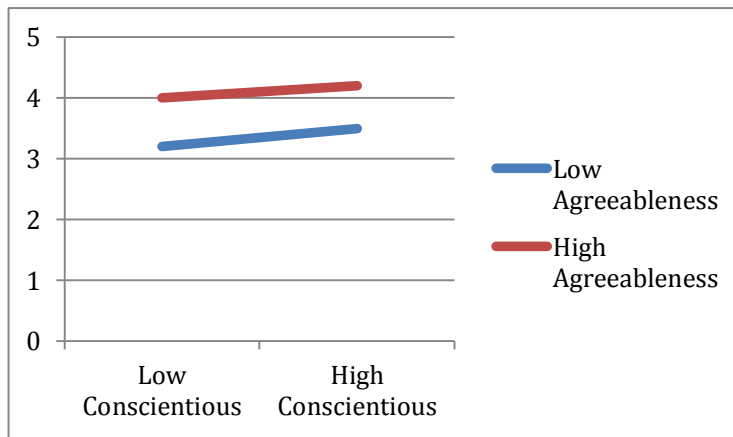Individual Differences*, *51*(8), 925-929. doi:10.1016/j.paid.2011.07.026

Figure 1. *Mean self-sacrifice help for the Experimental Prime (above) and the Control Prime (below) conditions*
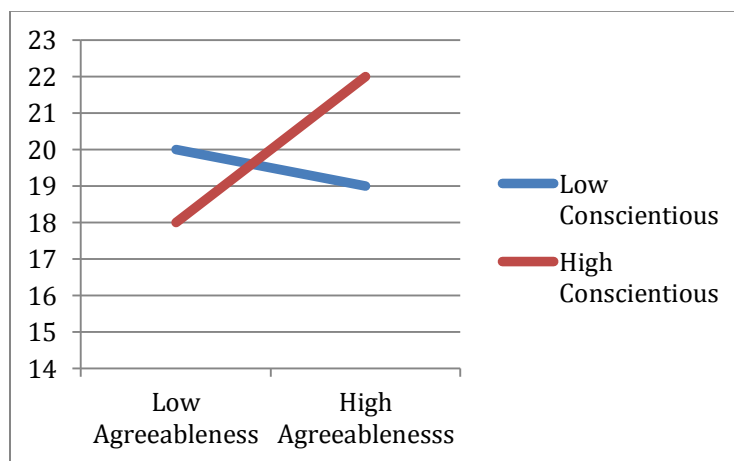

Figure 2. *Mean of individual Provision of Help condition*