Interpersonal Dynamics of Volunteers for a Simulated Prison Study, General Psychological Study, and a Helping-Behavior Study

Thomas Carnahan
Western Kentucky University

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INTERPERSONAL DYNAMICS OF VOLUNTEERS FOR A SIMULATED PRISON STUDY. GENERAL PSYCHOLOGICAL STUDY, AND A HELPING-BEHAVIOR STUDY

A Thesis
Presented to
the Faculty of the Department of Psychology
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In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

by
Thomas Jay Carnahan

May 2004
INTERPERSONAL DYNAMICS OF VOLUNTEERS FOR A SIMULATED PRISON STUDY, GENERAL PSYCHOLOGICAL STUDY, AND A HELPING-BEHAVIOR STUDY

Date Recommended 5-7-04

Ann M. Finland
Director of Thesis

[Signature]

[Signature]

Dean, Graduate Studies and Research Date

Elmer Gray 5/26/04
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INTERPERSONAL DYNAMICS OF VOLUNTEERS FOR
A SIMULATED PRISON STUDY, GENERAL PSYCHOLOGICAL
STUDY, AND A HELPING-BEHAVIOR STUDY

Thomas J. Carnahan
May 2004

Directed by: Dr. Sam McFarland, Dr. Elizabeth Shoenfelt, Dr. Jacqueline Pope

Department of Psychology
Western Kentucky University

Abstract

The Stanford Prison Experiment (SPE) is one of the most studied and celebrated studies within social psychology. The results have long been attributed to the power of the situation and the roles that were given to the participants. The present study was based on research concerning how personality variables influence interest in volunteerism. The research hypotheses center around the belief that individuals who volunteer for a study on prison life (similar to the advertisement for the SPE) would differ on personality variables (Machiavellianism, narcissism, social dominance, authoritarianism, aggression, empathy, and altruism) from individuals who volunteer for a generic psychological study or a helping-behavior study. The results indicated full support for all of the hypotheses and that the SPE was likely confounded by the recruitment technique used by the SPE creators, which elicited only those participants who have been shown in this study to be more aggressive, emotionally detached, authoritative, and lacking in empathy for others in interpersonal situations.
Introduction and Review of Literature

The Stanford Prison Experiment (SPE; Haney, Banks & Zimbardo, 1973) is one of social psychology’s most discussed and controversial experiments, second only to the Milgram (1963) studies of obedience. The SPE is often cited in textbooks as a clear demonstration of the power of the social situation (Haney & Zimbardo, 1998). Despite this level of discussion, interpretation of the SPE’s results have rarely been questioned in professional journals or other literature. Most researchers agree on the fundamental power of role-playing and that the power of situations was shown to overwhelm dispositions and degrade the quality of human nature (Zimbardo, Malach, & Haney, 2000).

The following literature review describes the rationale, methodology, and results of the SPE (Haney, Banks & Zimbardo, 1973; Zimbardo, et al., 2000). The literature review also describes a criticism of the methodology used by Haney, Banks, and Zimbardo (Banuazizi & Movahedi, 1975) as well as other reviews of the SPE (Zimbardo et al., 2000; DeJong, 1975; Doyle, 1975). Last, this section includes a brief review of the measures used to address possible differences in participant personality who volunteer for a simulated prison experiment, a helping behavior task, and a generic psychological study.

Rationale of the Stanford Prison Experiment

Phillip Zimbardo, one of the masterminds of the SPE, gave three justifications for conducting the prison experiment (Zimbardo et al., 2000). Two of the justifications were conceptual, the other pedagogical. The first conceptual justification is that for many years preceding the SPE, Zimbardo had been studying the power of situations that could elicit antisocial acts by ordinary people through vandalism and dehumanization. Along with Craig Haney and Curt Banks, Zimbardo wondered how individuals would react within an
experimental setting in which all participants were anonymous and either dehumanized or deindividuated.

The second conceptual justification rested in an experiment on the power of social situations on interpersonal dynamics. Many previous studies had been performed to test this concept, but the authors of the SPE wanted to perform this type of research without imposing constant authority on the participants. Their theory stemmed from the belief that ordinary people commit evil acts every day without coercive authority demanding their obedience. Zimbardo wrote that the SPE focused primarily “on the power of roles, rules, symbols, group identity, and situational validation of ordinarily ego-alien behaviors and behavioral styles” (Zimbardo et al., 2000, p. 204).

Pedagogically, the SPE emerged from a social psychology course Zimbardo taught during student demonstrations against Stanford University that were related to anti-Vietnam War sentiment. He invited his students to become the professor (in effect switching roles) and teach their professor on 10 topics on which Zimbardo was interested but not informed. Examples included the effects of being put into an old-age home, media distortion of information, and the psychology of imprisonment. One group chose the psychology of imprisonment and conducted their own weekend-long mock prison experiment before giving their presentation. The students’ presentation included the powerful effects of their mock prison. After the presentation, Zimbardo wondered if the mock prison actually did create the types of distress and role identifications described by the students. The combination of all these factors led to the creation of the SPE (Zimbardo et al., 2000).
Overview of the Methodology of the Stanford Prison Experiment

The creators of the SPE placed an advertisement in the local newspaper looking for male college students to take part in a psychological study of prison life (Haney et al., 1973). They were to be compensated $15 a day, and the study was scheduled to last one to two weeks. The advertisement instructed interested students to go to Jordan Hall on Stanford University’s campus for further information and applications. Students who inquired for further information were asked to complete a questionnaire concerning a multitude of background issues, including mental health history and family history of psychopathology. Of the 75 participants who responded to the newspaper advertisement, 24 were selected to continue in the study due to their physical and mental stability, as well as a lack of past anti-social behaviors.

These 24 participants completed a battery of psychological tests: The F-scale of Authoritarian Personality (guards mean = 4.36, prisoners mean = 4.78), the Machiavellianism Scale (guards mean = 7.73, prisoners mean = 8.77), and the Comrey Personality Scale (see Table 1 for subscale means). Unfortunately, Zimbardo and his colleagues discussed only the results of these psychological tests to “prove” that the prisoners and guards were not different, and that neither group was different from the normal population. There are several methodological problems noted here. First, they did not provide the reader with a clear idea of what the results mean. For example, what does 4.36 on the F scale of Authoritarian Personality mean? It likely represents a mean on each item, but the authors did not say if the response scale was 1 to 5, 1 to 7, or 1 to 9. Furthermore, Zimbardo did not report the scores for the “normal” population that he referred to. Three of the participants either withdrew before the study began or were chosen to “stand-by” in case they were needed and were not
used for the experiment. Therefore, the data collected on the SPE was based upon 21
participants.

Table 1. Mean Scores for Prisoners and Guards on Eight Comrey Subscales.

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Guards</th>
<th>Prisoners</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trustworthiness</td>
<td>89.64</td>
<td>92.56</td>
</tr>
<tr>
<td>Orderliness</td>
<td>73.82</td>
<td>75.67</td>
</tr>
<tr>
<td>Conformity</td>
<td>63.18</td>
<td>65.67</td>
</tr>
<tr>
<td>Activity</td>
<td>91.73</td>
<td>89.78</td>
</tr>
<tr>
<td>Stability</td>
<td>101.45</td>
<td>98.33</td>
</tr>
<tr>
<td>Extroversion</td>
<td>81.91</td>
<td>83.22</td>
</tr>
<tr>
<td>Masculinity</td>
<td>87.00</td>
<td>88.44</td>
</tr>
<tr>
<td>Total</td>
<td>95.36</td>
<td>91.78</td>
</tr>
</tbody>
</table>

The subjects signed a contract in which they were told that they were forfeiting some
of their basic civil rights. They were not told at that time that they would be role playing a
guard or a prisoner. The participants were instructed to be at their homes on a given Sunday
when the experiment would officially begin. The day before the first day of the study, those
randomly chosen to be guards were given an orientation meeting in which they met with
Zimbardo (the Superintendent of the prison) and a graduate student (the Warden of the
prison). According to the SPE article authored by Haney et al. (1973), Zimbardo’s only
instruction to the guards was to maintain reasonable functionality within the prison, however
this was not the case as will be revealed later. Through the help of the local police
department, the prisoners were picked up by real police officers, handcuffed, read their
rights, and properly booked as criminals. They were then blindfolded and transported to a
simulated prison in the basement of a building on Stanford University’s campus.

Overview of Results of the Stanford Prison Experiment

The major finding of the SPE is that the environment of the simulated prison greatly
impacted the emotions of both the guards and the prisoners, and the interpersonal
relationships between the two groups. Both groups became more angry and distressed and the guards became more violent in the treatment of both their peers and subordinates, while the prisoners became more violent with their peers but increasingly obedient towards the guards. All participants appeared to internalize their roles and became self-critical and depressive in self-evaluations as the experiment progressed. The creators of the SPE told the participants that there were no limits on their behavior and that they were free to interact as they wished. The participants chose to be hostile and negative in their actions towards each other. In fact, five of the prisoners were released early due to “extreme emotional depression, crying, rage, and acute anxiety” (p. 6). Due to these reactions, and other extreme behaviors by the guards and prisoners, the experiment was ended after the sixth day.

Zimbardo and his colleagues attest that the participants were completely normal on all personality measures used, and that their behavior can only be explained by the power of the situation and the power of internalizing their roles. Zimbardo proposed 10 lessons learned from the SPE which are briefly listed below:

- Some situations can exert powerful influences over individuals, causing them to behave in ways they would not, could not, predict in advance.
- Situational power is most salient in novel settings in which the participants cannot call on previous guidelines for their new behavior and have no historical references to rely on.
- Situational power involves ambiguity of role boundaries, authoritative or institutionalized permission to behave in prescribed ways or to disinhibit traditionally disapproved ways of responding.
- Role playing—even when acknowledged to be artificial, temporary, and situationally bound—can still come to exert a profoundly realistic impact on the actors.
• Good people can be induced, seduced, initiated into behaving in evil (irrational, stupid, self-destructive, antisocial) ways by immersion in “total situations” that can transform human nature in ways that challenge our sense of the stability and consistency of individual personality, character, and morality.

• Human nature can be transformed within certain powerful social settings in ways as dramatic as the chemical transformation in the captivating fable of Dr. Jekyll and Mr. Hyde.

• Despite the artificiality of controlled experimental research such as the SPE or any of Milgram’s many variations on the obedience paradigm, when such research is conducted in a way that captures essential features of “mundane realism,” the results do have considerable generalizability power.

• Selection procedures for special tasks, such as being prison guards—especially for those that are relatively new to the applicants—might benefit from engaging the participants in simulated role playing rather than, or in addition to, screening on the basis of personality testing.

• It is necessary for psychological researchers who are concerned about the utility of their findings and the practical application of their methods or conclusions to go beyond the role constraints of academic researcher to become advocates for social change.

• Prisons are places that demean humanity, destroy the nobility of human nature, and bring out the worst in social relations among people. (Zimbardo et al., 2000, pp. 204-211)

Critical Review of the Stanford Prison Experiment Methodology

In a methodological analysis of the SPE, Banuazizi and Movahedi (1975) discussed three alternative explanations of the SPE’s outcome. First, the authors felt that the
participants were acting upon strong stereotypes that they brought with them about how guards and prisoners truly interact in a real prison. Second, Banuazizi and Movahedi felt that the orchestrators of the SPE inadvertently provided many cues leading the participants to react in the dehumanizing way that they did, such as asking the participants to keep order in the prison. Third, the combination of the first two culminated in the participants “complying with the actual or perceived demands in the experimental situation, and acting on the basis of their own role-related expectancies, the subjects produced data highly in accord with the experimental hypothesis” (p. 156).

This critical review of the SPE became a topic of debate among many psychologists. Doyle (1975) wrote in response to the Banuazizi and Movahedi article that they ignored the uniqueness of role playing, which is an ongoing time sequenced interaction that players respond to their own stereotyped images of the role, the situational constraints accepted by all the players, and the actions of the other players. Doyle asserted that although the participants may have been reacting based on their stereotypes at first, that eventually their behavior was more determined by past interactions with the other role players, and by the current situation. This belief was also held by DeJong (1975) who wrote “a qualitative difference does not exist. Like real guards, the prison study guards began slowly but, once disinhibited, soon freely aggressed against the prisoners as a matter of routine” (p. 1015).

In a discussion of the findings of the SPE, Haslam and Reicher (2003) questioned the validity of Zimbardo’s claims that the guards and prisoners were not instructed on the nature of their roles. Haslam and Reicher discovered through their viewing of the video of the SPE released by Zimbardo (1989) that Zimbardo provided instructions to the guards other than what is reported in Haney et al. (1973). These instructions sanctioned oppressive treatment
of the Prisioners (Haslam & Reicher, 2003). The complete instructions given by Zimbardo were as follows:

You can create in the Prisoners feelings of boredom, a sense of fear to some degree, you can create a notion of arbitrariness that their life is totally controlled by us, by the system, you, me and they'll have no privacy...They have no freedom of action they can do nothing, say nothing that we don’t permit. We’re going to take away their individuality in various ways. In general what all this leads to is a sense of powerlessness. That is, in this situation we’ll have all the power and they’ll have none.
(Zimbardo, 1989)

As eluded to earlier, these instructions were described by the original SPE publication as much more mundane than they were actually given by Zimbardo. Due to these overt instructions, the results of the SPE may not be as surprising as Zimbardo would have us to believe.

*Personality Differences in Volunteerism*

Many studies have shown that there are differences between those who volunteer for psychological studies and non-volunteers on a number of personality measures (Burns, 1974; Griffith & Walker, 1976; Hobfoll, 1980; Raymond & King, 1973). Raymond and King (1973) argued that since many of the generalizations that psychologists make are based only on the data collected from willing volunteers, their conclusions may not apply to the personality types of non-volunteers. Griffith and Walker (1976) found that the type of experiment affected the interest of different personality types. They asserted that volunteerism contained interactions of personality characteristics and situation variables, such as the kind of experiment being volunteered for, conditions of volunteering, and incentive levels. For example, Hobfoll (1980) found that participants who volunteered for a helping behavior task (tutoring for inner-city preschool children) that were not given
conditions for volunteerism, or monetary incentives, were higher on a measure of social responsibility.

For many years, research has found that people who enter various types of situations are motivated by their personal characteristics and personality (Bandura, 1982; Emmons & Diener, 1986; Mischel, 1977). Personality characteristics, such as empathy, have been shown to predict the possibility that bystanders will provide help when asked (Eisenberg & Miller, 1987; Underwood & Moore, 1982).

Allen, Lucero, and Van Norman (1997) performed a study of volunteers and non-volunteers for employee involvement programs. This study defined employee involvement programs as any program designed to increase employee involvement in training programs. The authors found that volunteers had significantly more motivation to participate in the program, and that these volunteers had friends and families who were more supportive of their involvement in the program. Individual differences also played a role in the decision to volunteer or not. Individuals who viewed volunteering in employee involvement programs as beneficial to fellow employees as well as to themselves tended to volunteer on a more consistent basis.

Snyder and Omoto (2001) claimed that volunteerism is also shaped by the environmental factors and cultural contexts in which the volunteering occurs. Individuals who volunteer for charitable and other pro-social activities have been shown through many studies to have altruistic personalities and humanitarian concerns (Carlo, Eisenberg, Troyer, Switzer, & Speer, 1991; Rushton, 1984, Staub, 1974), or purely altruistic motives designed to help others (Batson, 1998).
The present study addressed personality differences between volunteers for a study on helping behaviors, a generic psychological study, and a study of prison life. Because people's choices of environmental situations are determined in part by their personality characteristics (Davis, Mitchell, Hall, Lothert, Snapp & Meyer, 1999), the current study aimed to discover whether or not personality characteristics also determine if interest in volunteering for psychological studies differs based on the reported subject of the study. If this is true, then the SPE was confounded from the beginning due to the participant's interest in this type of study, and matching personality which promoted the participants' aggressive and punitive behavior.

**Personality Measures**

Seven measures of participant personality were used for the present effort. Each measure is described below with supplemental reliability and past research evidence to support its use. These seven scales were chosen because they represent constructs that were explicitly or implicitly measured by the original SPE, or because the researcher was interested in the differences between the three conditions in the present study on the scale(s). The seven scales used are as follows: the Machiavellianism scale (Mach IV), the Narcissistic Personality Inventory (NPI), the Social Dominance Orientation scale (SDO6), the Right-Wing Authoritarianism scale (RWA), the Self-Report Altruism Scale (SRAS), the Interpersonal Reactivity Index (IRI) and the Aggression Questionnaire. These scales were chosen to discover possible personality differences of participants that could determine if certain types of people are inherently drawn to volunteer for specific types of psychological research.
Machiavellianism. Machiavellianism is defined as a person’s general strategy for dealing with people, especially the degree to which the person feels that others are manipulable in interpersonal situations. The Machiavellianism scale was designed by Christie and Geis (1970) by drawing scale items from Machiavelli’s *The Prince* and *The Discourses*. Through the years, other versions of the Machiavellianism scale were created. The ten-highest rated items worded in the Machiavellian direction and the ten-highest rated items worded in the opposite direction were selected to create the fourth Machiavellianism scale, the Mach IV. Therefore, the Mach IV has 20 total items and split-half reliabilities have averaged .79 for the scale. In studies, Machiavellianism has not been related to being more hostile, vicious, or vindictive, but it has been related to an emotional detachment which makes manipulation of other people for one’s own gains easier. Due to this, individuals who are high in Machiavellianism are more emotionally detached from interpersonal relationships and would be expected to volunteer for the prison study due to that setting being more dominant/subordinate with no emotional interpersonal contact. Individuals who are low in Machiavellianism are more likely to volunteer for a helping behavior study because they will be more emotionally attached to the people they are unselfishly attempting to aid.

Narcissism. The narcissistic personality is defined by the following eight characteristics listed by Raskin and Hall (1979).

- A grandiose sense of one’s self importance.
- A preoccupation with fantasies of unlimited success, power, brilliance, beauty, or ideal love.
- Exhibitionism.
• Responds to criticism, indifference, or defeat either with cool indifference or with marked feelings of rage, inferiority, shame, humiliation, or emptiness.

• A sense of entitlement, expecting special favors without assuming reciprocal responsibilities.

• Exploitativeness.

• Relationships vacillate between the extremes of over idealization and devaluation.

• Lack of empathy.

The Narcissistic Personality Inventory (NPI) was created through a collaborative effort by Raskin and Hall (1979) from Santa Cruz, California. The NPI consists of 14 items, and split-half reliabilities have averaged .80 for the scale. Narcissists have been shown to be outgoing, impulsive, uninhibited, aggressive, quick to anger, take chances, and not always reliable in interpersonal relationships (Raskin & Hall, 1981). For these reasons, individuals who are high in narcissism would be expected to be drawn to the prison study because of their desire for power, lack of empathy, and sense of entitlement. Individuals low in narcissism would be expected to be drawn to the helping behavior study, due to their unselfish lack of exploitation, and feelings of empathy.

*Social Dominance Orientation.* Social dominance is defined as “the degree to which individuals desire and support group-based hierarchy and the domination of ‘inferior’ groups by ‘superior’ groups” (Sidanius & Pratto, 1999 p. 48). The SDO6 was created through a collaborative effort by Jim Sidanius at UCLA and Felicia Pratto at the University of Connecticut. The scale was created to answer two fundamental social psychology questions: Why does one group of people discriminate against other groups? Why does this discrimination withstand elimination? The social dominance theory addresses these
questions through the human disposition to create social order through hierarchy. The scale is 16 items long, and has been shown to have a reliability of .76. Studies have shown that the SDO6 was correlated with many hierarchical legitimizing ideologies across American participants. The SDO6 correlated with racism or ethnic prejudice (.55), nationalism (.42), political conservatism (.30), and social legitimacy (.35), as well as many other legitimizing ideologies (Sidanius & Pratto, 1999). Individuals high in social dominance orientation would be expected to be drawn to volunteer for the prison study due to the explicit hierarchical structure within the prison system. Individuals low in social dominance would be expected to be drawn to volunteer for the helping behavior study due to their ability to view all people as equal and worthy of assistance and care.

*Right-Wing Authoritarianism (RWA)*. Authoritarianism is defined as a high degree of submission to “legitimate” authorities, general aggressiveness towards wrong doers, and a high degree of adherence to conventions endorsed by society (Altemeyer, 1996). The RWA scale was created by Bob Altemeyer at the University of Manitoba. The scale was developed to create a better measure of authoritarianism after limitations were discovered in the original unidirectional F-Scale. The third version of the RWA was created in 1996 to keep the scale up to date and socially relevant and contains 34 items. Reliability alphas have ranged from .84 to .89. Authoritarians have been shown to be very punitive, aggressive, and violent towards wrong doers. Authoritarians have also been shown to be self-contradictory or hypocritical (Altemeyer, 1996), and believe that criminals and political enemies get what they deserve. Individuals who are high in authoritarianism would be expected to be drawn to volunteer for the prison study due to the societally sanctioned aggressive and violent nature of the prison system. Individuals who are low in authoritarianism would be expected to be
drawn to volunteer for the helping behavior study due to their lack of punitive behavior and high level of unselfish empathetic behavior towards others.

**Altruism.** Altruism is defined as an unselfish devotion to others or to humanity in general. J. Philippe Rushton developed the Self-Report Altruism Scale to focus on individuals self-reported behaviors that are related to altruistic qualities (Rushton, 1984). The scale has 20 questions and has been shown to have correlations to other more difficult to administer altruism scales as high as .69. Research has shown that individuals high in altruism are more likely to volunteer in community health situations, not require any external incentive or payment, and were unselfish in their giving (Allen & Rushton, 1983). Individuals who are high in altruism would be expected to be drawn to volunteer for the helping behavior study due to their unselfish desire to help people in need. Individuals who are high in altruism would not be expected to be drawn to volunteer for the prison study due to the punitive and aggressive nature of the experiment.

**Dispositional Empathy.** Empathy refers to both cognitive and emotional reactions to understand another person’s perspective. Dispositional empathy is made up of four cognitive and affective facets: Empathetic concern, personal distress, perspective taking, and fantasy (Davis, 1983). Empathetic concern is defined as feelings of sympathy or compassion, perspective taking is a tendency to take the perspective of others, fantasy is the tendency to become involved with fictional characters, and personal distress is personal discomfort in the presence of others’ suffering. For the purposes of this study, only questions referring to empathetic concern and perspective taking were utilized. The Interpersonal Reactivity Index (IRI) was created by Mark Davis at the University of Texas at Austin. The IRI is comprised of 28 items and has a reliability alpha of .79. According to Rushton (1984), empathy is a
motivator for altruistic behavior. Rushton's studies have shown that people who are high in empathetic concerns for others perform more unselfish helping for others, including strangers. Individuals who are high in empathy would be expected to be drawn to volunteer for the helping behavior study due to their ability to experience the emotional state of the other, and their desire to ease the other's distress. Individuals who are low in empathy would be expected to be drawn to volunteer for the prison study due to their lack of understanding other people's emotions which will lead them to be more removed from the situation.

**Aggression.** Aggression refers to hostility, physical or verbal attacks, and destructive behavior. Buss and Perry (1992) created the Aggression Questionnaire which is made up of four factors: physical and verbal aggression, anger, and hostility. All of these factors were found by Buss to be distinct in a factor analysis. The short version of the scale used for this purpose is 6 items and has been shown to have internal consistency ratings of .72 to .85 and test-retest reliabilities of .80. Studies have shown that the Aggression Questionnaire is a much improved personality inventory and has high convergent validity with other scales that measure aggression, such as the Aggression Inventory (Archer, Kilpatrick, & Bramwell, 1995). Individuals who are high in aggression would be expected to volunteer for the prison study due to the aggressive and violent nature of the prison. Individuals who are low in aggression would be expected to be drawn towards the helping behavior study due to an increased sense of concern for others.

**Present Study**

The present study examined the personality differences on the seven personality scales presented above of respondents to a newspaper advertisement (similar to the Stanford Prison Experiment) asking for participants for a prison study, general psychological study,
and a study on helping behaviors. An example of the type of advertisement placed is as follows: College students needed for a psychological study (of prison life, of helping behaviors): $70 per day for 1-2 weeks beginning May 17th. For further information and applications, e-mail psychstudy@wku.edu. An example of e-mails for the other two conditions are: helpingbehavior@wku.edu and prisonstudy@wku.edu.

Hypotheses

Hypothesis 1a: Participants who volunteer for the prison study will be higher in Machiavellianism than participants who volunteer for either the neutral psychological study, or the study on helping behaviors.

Hypothesis 1b: Participants who volunteer for the helping behavior study will be lower in Machiavellianism than participants who volunteer for the prison study or the psychological study.

Hypothesis 2a: Participants who volunteer for the prison study will be higher in narcissism than participants who volunteer for either the psychological study, or the study on helping behaviors.

Hypothesis 2b: Participants who volunteer for the helping behavior study will be lower in narcissism than participants who volunteer for prison study or the psychological study.

Hypothesis 3a: Participants who volunteer for the prison study will be higher in social dominance than participants who volunteered for either the psychological study or the study on helping behaviors.
Hypothesis 3b: Participants who volunteer for the helping behavior study will be lower in social dominance than the participants who volunteer for the prison study or the psychological study.

Hypothesis 4a: Participants who volunteered for the prison study will be higher in authoritarianism than participants who volunteered for either the psychological study or the study on helping behaviors.

Hypothesis 4b: Participants who volunteer for the helping behavior study will be lower in authoritarianism than participants who volunteer for the prison study or the psychological study.

Hypothesis 5a: Participants who volunteer for the prison study will be lower in altruism than participants who volunteer for either the psychological study or the study on helping behaviors.

Hypothesis 5b: Participants who volunteer for the helping behavior study will be higher in altruism than participants who volunteer for the prison study or the psychological study.

Hypothesis 6a: Participants who volunteer for the prison study will be lower in empathy than participants who volunteer for either the psychological study or the study on helping behaviors.

Hypothesis 6b: Participants who volunteer for the helping behavior study will be higher in empathy than participants who volunteer for the prison study or the psychological study.
Hypothesis 7a: Participants who volunteer for the prison study will be higher in aggression than participants who volunteer for the psychological study or the study on helping behaviors.

Hypothesis 7b: Participants who volunteer for the helping behavior study will be lower in aggression than participants who volunteer for the prison study or the psychological study.
Method

Participants

The participants were 140 male college students from three doctoral degree granting universities, and six regional universities recruited from classified ads in their bi-weekly/daily college newspapers. The participants ranged in age from 18 to 25 (M = 21.64, SD = 2.1) years, and all participants met the minimum age requirements for informed consent. The sample consisted of 131 Caucasians, and 9 African Americans. Three participants were removed from analysis and their biographical information is not reported above because they were not males. Through the biographical data questions that are explained further in the Materials section, 48 of the participants data were removed due to their past family history of psychological disorders, or current self-reported mental health issue (such as depression or schizophrenia). Therefore, the information for this thesis was gathered from 92 total participants who completed the application and questionnaire for the study (61 psychological study respondents, and 31 prison study respondents). The helping-behavior condition was abandoned due to a lack of response.

Materials

Informed Consent Document. The informed consent document identified the nature and purpose of the project, explained the procedures, addressed potential discomfort and risks as well as benefits of participation, and addressed the issues of confidentiality and the participants’ right to withdraw from the study. Participants were asked to read and electronically sign the informed consent document. The informed consent document was explained to the participant as part of the application process for the study, and is provided in Appendix A.
Biographical Data. Participants completed a document (provided in Appendix A) asking items that pertained to biographical data including gender, race, and age. The participants were told that this document was their application for inclusion into the study. The Biographical Data section also asked questions pertaining to participant health, mental health, anti-social behavior, immediate family mental health and immediate family anti-social behavior. These questions are believed to be similar to the questions that Haney et al. (1973) used to choose participants whom they felt were the most mature and healthy.

Classified Ads. The independent variable, type of study volunteered for, was manipulated across three conditions (simulated prison study, psychological study, helping behavior study). The ads (provided in Appendix B) asked male college students to volunteer for a 1-2 week study on prison life/a psychological study/helping behavior study for $70 a day.

Instruments. Participants were asked to answer a set of 96 questions that were a combination of the Machiavellianism Scale Version IV (Mach IV), Narcissistic Personality Inventory (NPI), Social Dominance Orientation Questionnaire Version 6 (SDO6), Right Wing Authoritarianism scale (RWA), Self-Report Altruism Scale (SRAS), and Interpersonal Reactivity Index (IRI). The Mach IV, NPI, SDO6, RWA, and IRI were all rated on a 1 to 5 scale of strongly disagree (1) to strongly agree (5). The SRAS was rated on a 1 (never) to 5 (very often) scale of how often the participant had performed the action described in the question.

Procedure

One doctoral degree granting university and two of the regional universities were randomly selected to have a classified ad that asked for male college students to volunteer for
a 1-2 week study on prison life in return for $70 a day. One doctoral granting university and two of the regional universities were randomly selected to have a classified ad that asked for male college students to volunteer for a 1-2 week helping behavior study in return for $70 a day. A final group composing one doctoral granting and two regional universities was randomly selected to have a classified ad that asked for male college students to volunteer for a 1-2 week psychological study in return for $70 a day. Table 2 contains the group that each university was randomly selected to belong to, the condition for each group, and the undergraduate population of each university and group.

To reduce the chance that school differences would confound the findings, only the first 30 students from each school that successfully completed the application and questionnaire and were seen to be psychologically healthy were retained for analysis.

<table>
<thead>
<tr>
<th>Group</th>
<th>University (Population)</th>
<th>Group Population</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Austin Peay State University (6809) University of Tennessee Knoxville (19956) Western Kentucky University (15234)</td>
<td>41999</td>
<td>Psychological Study</td>
</tr>
<tr>
<td>2</td>
<td>Murray State University (8088) Middle Tennessee State University (21163) University of Louisville (14475)</td>
<td>43726</td>
<td>Simulated Prison</td>
</tr>
<tr>
<td>3</td>
<td>University of Kentucky (17878) Eastern Kentucky University (13053) Northern Kentucky University (12164)</td>
<td>43895</td>
<td>Helping Behavior</td>
</tr>
</tbody>
</table>

Unfortunately, responses to the classified advertisements were not as forthcoming as hoped by the researchers. After the first two weeks of data collection, data from 61 participants were collected for the psychological study (mainly from students attending the University of Tennessee and Western Kentucky University), but less than 10 male undergraduates completed the application and questionnaire the other two conditions
combined. Therefore, the researchers decided to test the results of the prison study questionnaires against the control psychological study group and abandon attempts at recruiting for the helping-behavior study. To combat this lack of data, the researchers chose to place classified advertisements in the University of Tennessee and Western Kentucky University college newspapers for the prison study condition. Strict records were kept to ensure that no duplicate applications and questionnaires were applied to by the same participant for both the psychological study and prison study conditions from these schools.

The male college students were instructed through the classified advertisements in their school newspapers to reply to one of the nine school and condition specific e-mail addresses for more information and an application. The principal investigator then replied to their e-mail with answers to individual participant questions. For example, many of the participants wanted to know information relating to the location of the experiment and a response was given that the study would be taking place on the campus of Western Kentucky University. The participant was then instructed that an e-mail would be sent to them for the application process (informed consent form and biographical data) and the questionnaire was also sent at this time. A copy of this e-mail for each condition is provided in Appendix C. The participants were asked to fill out the seven psychological measures, and the participant was given the chance to win one of six $50 prizes for the successful completion of the informed consent, biographical data, and questionnaire.

The application and questionnaire were designed to be easily downloaded through e-mail and filled out by the participant on their computer. A copy of the questionnaire is provided in Appendix D. The participant was then instructed to e-mail the completed application questionnaire back to the researcher, and await further instructions. When
enough applications and questionnaires were received for the two conditions in question to run statistical analysis, the participants were contacted by e-mail and debriefed that no simulation experiment would actually take place. The participants were told the real purpose of the study and thanked. A copy of this e-mail is provided in Appendix E. All further inquiries that followed this debriefing were informed that the researchers were no longer accepting applications for the study, and thanked for their interest.
Results

As reported earlier in the Method section, not enough responses were collected for the helping-behavior condition, and therefore, results are only given for hypotheses 1a, 2a, 3a, 4a, 5a, 6a, and 7a. Not enough data was collected to be able to test hypotheses 1b, 2b, 3b, 4b, 5b, 6b, or 7b.

Hypothesis 1a predicted that there would be a difference between the volunteers for the prison study and volunteers for the neutral psychological study on the measure for Machiavellianism (all results are presented in Table 3). This hypothesis was tested by performing two analyses. First, an F-test was performed to determine if there was a difference in the variances of the volunteers for the prison study (SD = 11.00) and the volunteers for the psychological study (SD = 6.86). Second, a one-tailed independent sample t-test was performed to determine if any differences existed between the mean scores for the volunteers for the prison study (M = 59.71) and the volunteers for the psychological study (M = 54.30). The first analysis indicated that there was not a significant difference in the variance between the two groups (F = 3.541, p = .063). The independent samples t-test revealed that the volunteers for the prison study were significantly higher in Machiavellianism, as measured by the Mach IV, compared to the psychological study volunteers (t(90) = 2.90, p = .003). This indicates that the volunteers for the prison study are more likely to use manipulation of others to achieve personal gain.

Hypothesis 2a predicted that there would be a difference between the volunteers for the prison study and volunteers for the neutral psychological study on the measure for narcissism. This hypothesis was tested by performing two analyses. First, an F-test was performed to determine if there was a difference in the variances of the volunteers for the
prison study (SD = 8.27) and the volunteers for the psychological study (SD = 6.61). Second, a one-tailed independent sample t-test was performed to determine if any differences existed between the mean scores for the volunteers for the prison study (M = 51.00) and the volunteers for the psychological study (M = 46.02). The first analysis indicated that there was not a significant difference in the variance between the two groups (F = .97, p = .328). The independent samples t-test revealed that the volunteers for the prison study were significantly higher in narcissism, as measured by the Narcissistic Personality Inventory, compared to the psychological study volunteers (t(90) = 3.14, p = .001). This indicates that the volunteers for the prison study are more likely to be impulsive, uninhibited, aggressive, and quick to anger.

Hypothesis 3b predicted that there would be a difference between the volunteers for the prison study and volunteers for the neutral psychological study on the measure for social dominance. This hypothesis was tested by performing two analyses. First, an F-test was performed to determine if there was a difference in the variances of the volunteers for the prison study (SD = 10.84) and the volunteers for the psychological study (SD = 6.98). Second, a one-tailed independent sample t-test was performed to determine if any differences existed between the mean scores for the volunteers for the prison study (M = 32.03) and the volunteers for the psychological study (M = 25.48). The first analysis indicated that there was a significant difference in the variance between the two groups (F = 4.47, p = .037). The independent samples t-test revealed that the volunteers for the prison study were significantly higher in social dominance, as measured by the Social Dominance Orientation (SDO), compared to the psychological study volunteers (t(43.01) = 3.06, p = .002). This indicates that the volunteers for the prison study are more likely to believe in the existence of superior
and inferior groups, and that the role of the superior group is to dominate and control the
inferior groups.

Hypothesis 4b predicted that there would be a difference between the volunteers for
the prison study and volunteers for the neutral psychological study on the measure for
authoritarianism. This hypothesis was tested by performing two analyses. First, an F-test
was performed to determine if there was a difference in the variances of the volunteers for
the prison study ($SD = 9.84$) and the volunteers for the psychological study ($SD = 7.26$).
Second, a one-tailed independent sample t-test was performed to determine if any differences
existed between the mean scores for the volunteers for the prison study ($M = 40.61$) and the
volunteers for the psychological study ($M = 36.07$). The first analysis indicated that there
was not a significant difference in the variance between the two groups ($F = 1.24, p = .268$).
The independent samples t-test revealed that the volunteers for the prison study were
significantly higher in authoritarianism, as measured by the Right Wing Authoritarianism
Scale, compared to the psychological study volunteers ($t(90) = 2.51, p = .007$). This
indicates that the volunteers for the prison study will hold feelings of aggressiveness towards
those who do not follow the rules and regulations set forth by the legitimate ruling
authorities.

Hypothesis 5b predicted that there would be a difference between the volunteers for
the prison study and volunteers for the neutral psychological study on the measure of
altruism. This hypothesis was tested by performing two analyses. First, an F-test was
performed to determine if there was a difference in the variances of the volunteers for the
prison study ($SD = 4.70$) and the volunteers for the psychological study ($SD = 6.87$). Second,
a one-tailed independent sample t-test was performed to determine if any differences existed
between the mean scores for the volunteers for the prison study \((M = 33.45)\) and the volunteers for the psychological study \((M = 36.00)\). The first analysis indicated that there was a significant difference in the variance between the two groups \((F = 5.19, p = .025)\). The independent samples t-test revealed that the volunteers for the prison study were significantly lower in altruism, as measured by the Self Report Altruism Scale, compared to the psychological study volunteers \((t(82.15) = -2.09, p = .020)\). This indicates that the volunteers for the prison study are more likely to be selfish in their reasons for volunteering.

Hypothesis 6b predicted that there would be a difference between the volunteers for the prison study and volunteers for the neutral psychological study on the measure of empathy. This hypothesis was tested by performing two analyses. First, an F-test was performed to determine if there was a difference in the variances of the volunteers for the prison study \((SD = 7.41)\) and the volunteers for the psychological study \((SD = 6.58)\). Second, a one-tailed independent sample t-test was performed to determine if any differences existed between the mean scores for the volunteers for the prison study \((M = 43.81)\) and the volunteers for the psychological study \((M = 47.57)\). The first analysis indicated that there was not a significant difference in the variance between the two groups \((F = 0.02, p = .898)\). The independent samples t-test revealed that the volunteers for the prison study were significantly lower in empathy, as measured by the Interpersonal Reactivity Index, compared to the psychological study volunteers \((t(90) = -2.49, p = .008)\). This indicates that the volunteers for the prison study are more likely to be emotionally removed from situations concerning the needs of others.

Hypothesis 7b predicted that there would be a difference between the volunteers for the prison study and volunteers for the neutral psychological study on the measure for
aggression. This hypothesis was tested by performing two analyses. First, an F-test was performed to determine if there was a difference in the variances of the volunteers for the prison study \((SD = 4.91)\) and the volunteers for the psychological study \((SD = 3.66)\). Second, a one-tailed independent sample t-test was performed to determine if any differences existed between the mean scores for the volunteers for the prison study \((M = 22.58)\) and the volunteers for the psychological study \((M = 18.41)\). The first analysis indicated that there was a significant difference in the variance between the two groups \((F = 6.05, p = .016)\). The independent samples t-test revealed that the volunteers for the prison study were significantly higher in aggression, as measured by the Aggression Questionnaire, compared to the psychological study volunteers \((t(47.46) = 4.18, p > .001)\). This indicates that the volunteers for the prison study were more likely to be hostile, engage in physical or verbal attacks, and behave in a destructive manner.

Table 3. Results of Analyses of Variance and Mean Differences Between Groups.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Condition</th>
<th>SD</th>
<th>F-test</th>
<th>Mean</th>
<th>t-test</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mach IV</td>
<td>Prison Study</td>
<td>11.00</td>
<td>3.54</td>
<td>59.71</td>
<td>2.90**</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Psychological Study</td>
<td>6.86</td>
<td></td>
<td>54.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPI</td>
<td>Prison Study</td>
<td>8.27</td>
<td>0.96</td>
<td>51.00</td>
<td>3.14**</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Psychological Study</td>
<td>6.61</td>
<td></td>
<td>46.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDO6</td>
<td>Prison Study</td>
<td>10.84</td>
<td>4.47*</td>
<td>32.03</td>
<td>3.06**</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Psychological Study</td>
<td>6.98</td>
<td></td>
<td>25.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RWA</td>
<td>Prison Study</td>
<td>9/84</td>
<td>1.24</td>
<td>40.61</td>
<td>2.51**</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Psychological Study</td>
<td>7.26</td>
<td></td>
<td>36.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SRAS</td>
<td>Prison Study</td>
<td>4.70</td>
<td>5.19*</td>
<td>33.45</td>
<td>-2.09*</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td>Psychological Study</td>
<td>6.87</td>
<td></td>
<td>36.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IRI</td>
<td>Prison Study</td>
<td>7.41</td>
<td>0.02</td>
<td>43.81</td>
<td>-2.49**</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Psychological Study</td>
<td>6.58</td>
<td></td>
<td>47.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AQ</td>
<td>Prison Study</td>
<td>4.91</td>
<td>6.05*</td>
<td>22.58</td>
<td>4.18**</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Psychological Study</td>
<td>3.66</td>
<td></td>
<td>18.41</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *(Significant at \(p = .05\)) **(Significant at \(p = .01\))
Discussion

Confirming Hypothesis 1a, those who volunteered for the prison study were significantly more Machiavellian than were those that volunteered for the undescribed psychological study. Confirming hypotheses 2a through 4a and 7a respectively, they were also more narcissistic, social dominant, authoritarian, and aggressive. Confirming Hypotheses 5a and 6a, volunteers for the prison study were lower in self-reported altruism and empathy than were volunteers for the psychological study.

These findings support the researchers’ belief that although role playing and the situation can be very powerful in and of themselves, volunteers do appear to self-select based upon personality traits. These personality traits, however, are pervasive and do not just affect individual interest levels and self-selection. They continue to be an active force on the individual’s behavior and decision-making process. Not only does Zimbardo’s (1989) release of the video of the Stanford Prison Experiment, which shows Zimbardo giving controversial instructions to the prison guards, elicit a confounding hypothesis to the SPE results, the present finding also presents a problem for Zimbardo’s conclusions.

The SPE was likely confounded first by the recruitment technique used by the SPE creators, which elicited only those participants who have been shown in this study to be more aggressive, emotionally detached, authoritative, and lacking in empathy for others in interpersonal situations. Individuals who volunteered for the study of prison life in the present experiment were significantly higher in these personality traits, and the combination and levels of these traits could have been a partial explanation for the results that Zimbardo and his colleagues found with their participants. The results of Zimbardo’s study are not so surprising considering the possibility that his participant pool was a self-selected group of
individuals more prone to engage in physical or verbal attacks, behave in a destructive manner, be aggressive towards those who break the rules, and to dominate inferior groups. Then, Zimbardo made a grave error in his instructions as Prison Warden to the participants playing the role of guards. The present experiment did not attempt elicit preconceived notions of how a guard should act by the participants as reported in the original documentation of the SPE (Haney, Banks, & Zimbardo, 1973). However, the results of the present study do support that Zimbardo’s results could have been caused by a combination of interest biased recruitment and the guards acting not on their preconceived notions but on Zimbardo’s instructions of how the guards should act (Zimbardo, 1989). With all this said, the present researchers do not downplay the importance of the SPE, or what it means to the world of social psychological research or understanding. However, we should not be so willing to take things at face value and not challenge the results, no matter how compelling. All possible explanations for an outcome should be examined and every possible evaluation investigated.

As stated earlier, a further study should be performed in which enough data can be collected on the proposed helping-behavior condition. It would be an important extension to these findings, and further the research on the strength of empathy and altruism in unselfish volunteerism. Also it is very important to look at the treatment of Iraqi prisoners by British and United States troops in Abu Ghraib prison as it relates to the SPE and the results of this study. Across the internet, people are already beginning to relate the cruel and humiliating treatment of the Iraqi prisoners to the findings of the SPE. By doing a quick search of Iraqi prisoners and the Stanford Prison Experiment on Google.com, many sites related to the media and social psychology are already trying to explain the soldiers’ behavior by the power
of the situation. The results of this study, however, bring to light another possible explanation. Those who choose to be in the military may possess similar personality traits to those that volunteered for the study of prison life, and these personality variables may help to explain their abusive behavior. Also, the explanation for the soldiers’ actions may be as simple as their having grown tired of being in Iraq, having been warned about discussing their opinions with the media, and needing someone on whom to vent their frustrations. It may be premature to give credit to the conclusions drawn by Zimbardo and his colleagues to explain these current events.

**Limitations**

There are potential limitations of the present study. Using hypothetical situations, such as the classified advertisements, is one of the most common yet practical ways of conducting this type of research. Despite the advantages, there are many limitations for this process. We may have attracted some participants due to the amount of money offered in the advertisement for the study. Results may have been different had the study targeted only those individuals who would have volunteered for the study based on interest alone.

Also, some of the participants may not have fully understood the directions, or they may have failed to comprehend the e-mail that was sent to them prior to their filling out the application and questionnaire. Four of the participants wrote back after they were debriefed that they thought they were guaranteed $70 a day, although it was explained to them otherwise.
References


Appendix A

Application for Admission into the Study

Informed Consent

Biographical Information
Thank you for your interest in this study. Before proceeding, we need to receive your informed consent to complete a biographical application and questionnaire. Some of the information you will be asked on the application is quite personal. However, any information you provide will be kept private and confidential by the researchers, Thomas Carnahan (270-745-2695 or caraatj@wku.edu) and Sam McFarland (270-745-4408 or sam.mcfarland@wku.edu) of the Department of Psychology at Western Kentucky University. The data provided will be used for a psychological study performed by the Department of Psychology at Western Kentucky University. If at any point you no longer wish to participate in this study, you may discontinue completing the application and questionnaire at any time and simply not return them to us. There are no negative consequences for discontinuing, except that you will not be able to participate in the study or be eligible for the drawing for one of six $50 prizes. Completing the application and questionnaire should create no discomforts or incur any risks to you.

If you agree to complete the application and questionnaire and continue participation in the study, please type in your name and mailing address below. Again, we assure you that your participation and the answers you provide will be kept absolutely confidential. If you have concerns about the ethics of this study at any time, you may contact Dr. Phillip Myers, Human Protections Administrator at Western Kentucky University at (270) 745-4652 or by e-mail at phillip.myers@wku.edu.

Name:

Address:
BACKGROUND AND DEMOGRAPHIC INFORMATION

Please do not put your name on this sheet.

Gender:

Race:

Age:

1. Are you generally in good physical health (except for occasional colds, etc.)?

2. Have you ever needed treatment for mental health problems (depression, etc.)?

3. Do you have any criminal convictions other than driving or parking violations?

4. Have any members of your immediate family been treated for mental health problems?

5. Have any members of your immediate family been convicted of crimes other than driving or parking violations?

6. How often have you destroyed others’ property since the age of 13? Respond with never, once, more than once.
7. How often have you stolen others’ property since the age of 13? Respond with never, once, more than once.

8. How often have you shoplifted from a clothing or department store since the age of 13? Respond with never, once, more than once.

9. How often have you left a restaurant without paying for your meal since the age of 13? Respond with never, once, more than once.

10. How often have you been involved in a personal physical conflict (such as fights) since the age of 13? Respond with never, once, more than once.
Appendix B

Classified Ads
Prison Life

Male college students needed for a psychological study of prison life: $70 per day for 1-2 weeks beginning May 17th. For further information and applications, e-mail: prison.study@wku.edu

Psychological Study

Male college students needed for a psychological study: $70 per day for 1-2 weeks beginning May 17th. For further information and applications, e-mail: psych.study@wku.edu

Helping Behavior Study

Male college students needed for a psychological study of helping behaviors: $70 per day for 1-2 weeks beginning May 17th. For further information and applications, e-mail: helping.behavior@wku.edu
Appendix C

First Response E-Mail

Prison Study

Psychological Study

Helping Behavior Study
Prospective Participant,

Thank you for your interest in the study on prison life. Before you will have an opportunity to participate, you need to complete the attached application (informed consent and demographic information) and questionnaire of 96 items. Completing these forms does not guarantee you the opportunity of entering the study for $70 a day for 1 to 2 weeks. The application process should take about 30 minutes. Both of these attachments need to be saved on your personal computer. Please do not print the documents or complete them with pen or pencil. Complete the application and questionnaire on your computer and return them to me as e-mail attachments.

Once we have received your completed application and questionnaire, you will be entered into a drawing for the possibility of winning one of six $50 prizes. As soon as we have received enough completed applications and questionnaires to begin the study, you will receive a second e-mail with details on the study of prison life.

Once again, thank you for your participation.

Thomas J. Carnahan
Western Kentucky University
Prospective Participant,

Thank you for your interest in the psychological study. Before you will have an opportunity to participate, you need to complete the attached application (informed consent and demographic information) and questionnaire of 96 items. Completing these forms does not guarantee you the opportunity of entering the study for $70 a day for 1 to 2 weeks. The application process should take about 30 minutes. Both of these attachments need to be saved on your personal computer. Please do not print the documents or complete them with pen or pencil. Complete the application and questionnaire on your computer and return them to me as e-mail attachments.

Once we have received your completed application and questionnaire, you will be entered into a drawing for the possibility of winning one of six $50 prizes. As soon as we have received enough completed applications and questionnaires to begin the study, you will receive a second e-mail with details on the psychological study.

Once again, thank you for your participation.

Thomas J. Carnahan
Western Kentucky University
Prospective Participant,

Thank you for your interest in the study of helping behaviors. Before you will have an opportunity to participate, you need to complete the attached application (informed consent and demographic information) and questionnaire of 96 items. Completing these forms does not guarantee you the opportunity of entering the study for $70 a day for 1 to 2 weeks. The application process should take about 30 minutes. Both of these attachments need to be saved on your personal computer. Please do not print the documents or complete them with pen or pencil. Complete the application and questionnaire on your computer and return them to me as e-mail attachments.

Once we have received your completed application and questionnaire, you will be entered into a drawing for the possibility of winning one of six $50 prizes. As soon as we have received enough completed applications and questionnaires to begin the study, you will receive a second e-mail with details on the helping behavior study.

Once again, thank you for your participation.

Thomas J. Carnahan
Western Kentucky University
Appendix D

Personality Measures
Part I.

Listed below are a number of statements. Each represents a commonly held opinion. There are no right or wrong answers. You will probably disagree with some items and agree with others. We are interested in the extent to which you agree or disagree with such matters of opinion.

Read each statement carefully. Then indicate the extent to which you agree or disagree by typing the number that corresponds with your level of agreement below the individual questions. The numbers and their meaning are indicated below:

5 Strongly Agree
4 Agree
3 Neutral
2 Disagree
1 Strongly Disagree

1. Never tell anyone the real reason you did something unless it is useful to do so.

2. The best way to handle people is to tell them what they want to hear.

3. One should take action only when sure it is morally right.

4. Most people are basically good and kind.

5. It is safest to assume that all people have a vicious streak and it will come out when they are given a chance.

6. Honesty is the best policy in all cases.

7. There is no excuse for lying to someone else.

8. Generally speaking, men won’t work hard unless they’re forced to do so.

9. All in all, it is better to be humble and honest than to be important and dishonest.

10. When you ask someone to do something for you, it is best to give the real reasons for wanting it rather than giving reasons which carry more weight.

11. Most people who get ahead in the world lead clean, moral lives.

12. Anyone who completely trusts anyone else is asking for trouble.

13. The biggest difference between most criminals and other people is that the criminals are stupid enough to get caught.
5  Strongly Agree
4  Agree
3  Neutral
2  Disagree
1  Strongly Disagree

14. Most men are brave.
15. It is wise to flatter important people.
16. It is possible to be good in all respects.
17. Barnum was wrong when he said that there’s a sucker born every minute.
18. It is hard to get ahead without cutting corners here and there.
19. People suffering from incurable diseases should have the choice of being put painlessly to death.
20. Most men forget more easily the death of their father than the loss of their property.
21. I would prefer to be a leader.
22. I see myself as a good leader.
23. People always seem to recognize my authority.
24. I like to have authority over other people.
25. I am a born leader.
26. I am going to be a great person.
27. I know that I am good because everyone keeps telling me so.
28. I think that I am a special person.
29. I like to be the center of attention.
30. I find it easy to manipulate people.
31. I can usually talk my way out of anything.
32. I want to amount to something in the eyes of the world.
5 Strongly Agree
4 Agree
3 Neutral
2 Disagree
1 Strongly Disagree

33. I have a strong will to power.
34. I really like to be the center of attention.
35. Some groups of people are simply inferior to other groups.
36. In getting what you want, it is sometimes necessary to use force against other groups.
37. It's OK if some groups have more of a chance in life than others.
38. To get ahead in life, it is sometimes necessary to step on other groups.
39. If certain groups stayed in their place, we would have fewer problems.
40. It's probably a good thing that certain groups are at the top and other groups are at the bottom.
41. Inferior groups should stay in their place.
42. Sometimes other groups must be kept in their place.
43. It would be good if groups could be equal.
44. Group equality should be our ideal.
45. All groups should be given an equal chance in life.
46. We should do what we can to equalize conditions for different groups.
47. Increased social equality is a positive thing.
48. We would have fewer problems if we treated people more equally.
49. We should strive to make incomes as equal as possible.
50. No one group should dominate in society.
51. Atheists and others who have rebelled against the established religions are no doubt every bit as good and virtuous as those who attend church regularly.
Strongly Agree  Agree  Neutral  Disagree  Strongly Disagree

52. The real keys to the “good life” are obedience, discipline, and sticking to the straight and narrow.

53. A lot of our rules regarding modesty and sexual behavior are just customs which are not necessarily any better or holier than those which other people follow.

54. It is always better to trust the judgment of the proper authorities in government and religion than to listen to the noisy rabble-rousers in our society who are trying to create doubt in people’s minds.

55. There is absolutely nothing wrong with nudist camps.

56. It may be considered old fashioned by some, but having a normal, proper appearance is still the mark of a gentleman and, especially, a lady.

57. People should pay less attention to the Bible and other old traditional forms of religious guidance, and instead develop their own personal standards of what is moral and immoral.

58. There is nothing wrong with premarital sexual intercourse.

59. It would be best for everyone if the proper authorities censored magazines so that people could not get their hands on trashy and disgusting material.

60. It is wonderful that young people today have greater freedom to protest against things they don’t like, and to make their own “rules” to govern their behavior.

61. Obedience and respect for authority are the most important virtues children should learn.

62. The facts on crime, sexual immorality, and the recent public disorders all show we have to crack down harder on deviant groups and troublemakers if we are going to save our moral standards and preserve law and order.

63. I often have tender, concerned feelings for people less fortunate than me.

64. I sometimes find it difficult to see things from the “other guy’s” point of view.

65. Sometimes I don’t feel very sorry for other people when they are having problems.
56

5 Strongly Agree
4 Agree
3 Neutral
2 Disagree
1 Strongly Disagree

66. I try to look at everybody’s side of a disagreement before I make a decision.

67. When I see someone being taken advantage of, I feel some kind of protective
towards them.

68. I sometimes try to understand my friends better by imagining how things look from
their perspective.

69. Other people’s misfortunes do not usually disturb me a great deal.

70. If I’m sure I’m right about something, I don’t waste much time listening to other
people’s arguments.

71. When I see someone being treated unfairly, I sometimes don’t feel very much pity
for them.

72. I am often quite touched by things that I see happen.

73. I believe that there are two sides to every question, and try to look at them both.

74. I would describe myself as a pretty soft-hearted person.

75. When I’m upset at someone, I usually try to “put myself in his shoes” for a while.

76. Before criticizing somebody, I try to imagine how I would feel if I were in their
place.

77. I am an even-tempered person.

78. Sometimes I fly off the handle for no good reason.

79. I have trouble controlling my anger.

80. I sometimes feel that people are laughing at me behind my back.

81. Other people always seem to get the breaks.

82. At times I feel I have gotten a raw deal out of life.
Part II.

Give the frequency that you have carried out the following acts by typing the number that corresponds to your answer under the question.

1 Never
2 Once
3 More than Once
4 Often
5 Very Often

83. I have given money to a charity.
84. I have given money to a stranger who needed it (or asked me for it).
85. I have donated goods or clothes to a charity.
86. I have done volunteer work for a charity.
87. I have donated blood.
88. I have helped carry a stranger’s belongings (books, parcels, etc.).
89. I have allowed someone to go ahead of me in a line up (at a xerox machine, in the supermarket).
90. I have given a stranger a lift in my car.
91. I have pointed out a clerk’s error (in a bank, at the supermarket) in undercharging me for an item.
92. I have bought “charity” Christmas cards deliberately because I knew it was a good cause.
93. I have helped a classmate whom I did not know that well with a homework assignment when my knowledge was greater than his or hers.
94. I have before being asked, voluntarily looked after a neighbor’s pets or children without being paid for it.
95. I have offered to help a handicapped or elderly stranger across a street.
96. I have offered my seat on a bus or train to a stranger who was standing.
Appendix E

Debriefing E-Mail
Dear Participant,

Thank you for completing the application and questionnaire. If your name was drawn for one of the six $50 dollar prizes, it has been sent to you at the address you supplied on your application.

The actual purpose of this study was to determine if there are personality differences in volunteers for different psychological studies. For this study, participants at nine universities were recruited through similar classified ads for a study on prison life, a generic psychological study, or a study on helping behaviors. Specifically, we wanted to know if these three studies attracted participants with different personalities.

If you have taken a psychology class, you probably know about Phillip Zimbardo’s famous prison study. In that study, students assigned to play the role of guards in a simulated prison quickly became cruel. We wanted to know if those who volunteer for a study such as Zimbardo’s prison study differ in their personalities from those who might volunteer for a study of helping behavior or for a generic psychological study.

Our study is now completed. The prison study for which some of you volunteered cannot be conducted for ethical reasons, and the other studies were not needed for this research. There will be no simulated study, and unfortunately, no opportunity for you to make $70 a day for your participation. We apologize for this deception, but it was necessary to determine if personality differences lead to interest in particular types of studies, and if these differences could have influenced Zimbardo’s results. We hope that you will understand and forgive this deception. Your participation in our study will likely lead to an increased understanding on why Zimbardo obtained such surprising results in his prison study.

If you wish to have your data removed from this study due to this deception, please reply to this e-mail and let the researchers know. If you have any further questions, you may reply to this e-mail. Once again, thank you for your participation.

Thomas J. Carnahan
Western Kentucky University