Journal of Psychological Inquiry

Journal of Psychological Inquiry
Volume 15, Number 1-2, Spring-Fall 2010

Contents

Articles

Special Features

Psychological Analyses—Dramatic

Conducting Psychological Analyses–Current Events

Psychologically Speaking

An Invitation to Contribute to the Special Features Section

Acknowledgement - Reviewers

The following individuals reviewed manuscripts for this volume of the *Journal of Psychological Inquiry.* We gratefully acknowledge their valuable contributions to the journal.

Harriet Bachner, Pittsburg State University

Joseph Benz, University of Nebraska at Kearney

Jennifer Bonds-Raacke, University of North Carolina, Pembroke

Wayne Briner, University of Nebraska at Kearney

Kevin Byrd, Ohio University

AmyKay Cole, Missouri Southern State University

Krista Forrest, University of Nebraska at Kearney

Krista Fritson, University of Nebraska at Kearney

Carolyn Licht, Colombia University Medical Center at Harlem Hospital

Jean Mandernach, Park University

Gwen Murdock, Pittsburg State University

Michael Rose, Collin College

Jeffrey Sieracki, Loyola University Chicago

Janet Smith, Pittsburg State University

Valerie T. Smith, American International College

Chris, Spera, Pittsburg State University

Kimberly Tanuvasa, Collin College

Theresa Wadkins, University of Nebraska at Kearney

Bill Wozniak, University of Nebraska at Kearney

Acknowledgement - Institutions and Organizations

Cover Design

The creation of the graphic for the logo came about by thinking of how ideas are formed and what the process would look like if we could see into our brains. The sphere represents the brain, and the grey matter inside consists of all the thoughts in various stages of development. And finally, the white spotlight is one idea that formed into a reality to voice. The entire logo is an example of creation in the earliest stages.

Cathy Solarana, Graphic Designer

Instructions for Contributors

The *Journal of Psychological Inquiry* encourages undergraduate students to submit manuscripts for consideration. Manuscripts may include empirical studies, literature reviews, and historical articles; manuscripts may cover any topical area in the psychological sciences. Write the manuscript for a reading audience versus a listening or viewing audience.

1. Manuscripts must have an undergraduate as the primary author. Manuscripts by graduates will be accepted if the work was completed as an undergraduate. Graduate students or faculty may be co-authors if their role was one of teacher or mentor versus full fledged collaborator.

2. Manuscripts must (a) have come from students at institutions sponsoring the Great Plains Students' Psychology Convention and the *Journal of Psychological Inquiry* or (b) have been accepted for or presented at the meeting of the Great Plains Students' Psychology Convention, the Association for Psychological and Educational Research in Kansas, the Nebraska Psychological Society, the Arkansas Symposium for Psychology Students, or the IL-LOWA Undergraduate Psychology Conference. The preceding conditions do not apply to manuscripts for the Special Features Sections I, II, or III.

3. Send original manuscripts only. Do not send manuscripts that have been accepted for publication or that have been published elsewhere.

4. All manuscripts should be formatted in accordance with the APA manual (latest edition). Students are encouraged to use the second printing of the 6th edition of the APA manual; however, submissions using 5th edition of APA format will be accepted until December 2010.

5. Empirical studies should not exceed 15 double-spaced pages; literature reviews or historical papers should not exceed 20 double-spaced pages. The number of pages excludes the title page, abstract, references, figures, and tables. We expect a high level of sophistication for literature reviews and historical papers.

6. The *Journal* requires three (3) hard copies, and one electronic copy (CD-rom) of the manuscript in near letter quality condition using 12 point font.

7. Provide e-mail addresses for the author(s) and faculty sponsor.

8. Include a sponsoring statement from a faculty supervisor. (Supervisor: Read and critique papers on content, method, APA style, grammar, and overall presentation.) The sponsoring letter should indicate that the supervisor has read and critiqued the manuscript. In addition, assert that the research adhered to the APA ethical standards. Finally, confirm that the planning, execution, and writing of the manuscript represents primarily the work of the undergraduate author(s).

9. Include a self-addressed stamped envelope of proper size and with sufficient postage to return all materials.

10. On a separate sheet, type the following information:
    (a) Names, current mailing addresses, and phone numbers of all authors

    (b) Name and address of your school

    (c) Name, phone, and mailing address (if other than your school) of your faculty supervisor

    (d) Permanent address and phone number (if different from current) of primary author.

11. Ordinarily, the review process will be completed in 60 days.

12. If the editor returns a manuscript that requires revisions, the author(s) is (are) responsible for making the necessary changes and resubmitting the manuscript to the *Journal*. Sometimes you may have to revise manuscripts more than once. 5/10

Send submissions to:

Susan R. Burns, Managing Editor
Journal of Psychological Inquiry
Morningside College
1501 Morningside Ave
Sioux City, IA 51106

Checklist:

_____ Three hard copies and one electronic copy of the manuscript (#6)
_____ E-mail addresses for author(s) and faculty sponsor (#7)
_____ Sponsoring statement by a faculty supervisor (#8)
_____ Self-addressed, stamped envelope for the return of all materials (# 9)
_____ Names and addresses of authors and sponsor (#10)

At First Sight: Socioeconomic Status and Halo Effects on Judgments of Children

Crystal S. Avon and Wind Goodfriend*

Buena Vista University

Abstract

This study investigated the association between a child's appearance and how he/she is judged by students and by professional daycare workers. Target photographs manipulated both physical attractiveness and perceived socioeconomic status of children, based on pilot testing. Surprisingly, participants' ratings of children did not vary based on attractiveness, and ratings of low-SES children were more positive than those for high-SES children. Importantly, daycare workers judged children in a more neutral manner, compared to college students, perhaps due to experience and training. We discuss implications for the treatment toward children in a variety of contexts.

Keywords: socioeconomic status, halo effects, children

A picture may be worth a thousand words, but few people realize how dangerous this judgment can be. When a child is cared for by someone who is not part of his or her family, the caretaker may make judgments based on static cues such as dress and physical appearance, and dynamic cues such as body movement and vocal characteristics (Masip, Garrido, & Herrero, 2003; 2004). This bias can affect treatment of children. Past research, detailed below, has focused on how static and dynamic cues may be used to label children. The purpose of the current study was to further explore these biases. We explored two samples, college students and professional daycare workers, and included both physical appearance and perceived socioeconomic status of children as possible biasing constructs. If superficial biases lead to differential treatment of children, further training for child care workers may be necessary to avoid such biases.

The Halo Effect

A halo effect is an error of judgment in which raters will have a generally favorable or unfavorable attitude toward individuals based on physical appearance. "After the rater has cast a halo around his subject, he is so dazzled by its radiance that he cannot differentiate the subject's separate qualities" (Johnson & Vidulich, 1956, p. 130). This tendency is sometimes referred to as the attractiveness bias (Perlini, Bertolissi, & Lind, 1999). In other words, positive traits such as being more sociable or kind are sometimes ascribed to physically attractive people, simply because they are physically attractive.

There is not a lot of research on halo effects regarding children. Most research on judgments of children is based on teachers and their ability to identify students with different disorders such as Attention Deficit Hyperactive Disorder

(ADHD) or Oppositional Defiant Disorder (ODD). Some of these studies show that judgments are gender specific. For example, Jackson and King (2004) found that teachers diagnose boys with ADHD more often and girls with ODD more often, even when there is no difference in behavior. Other studies sought a better way for teachers to rate children with ADHD than the current system, the Connors Teacher/Parents Rating Scale (CTRS). The CTRS consists of 39 general statements about childhood behavior to screen children for disorders. Schachar, Sandberg, and Rutter (1986) did confirm that there is a halo effect of various behaviors, accounting for some of the misclassifications of hyperactivity, inattentiveness, and behavior problems. Extant research, such as the Schachar and colleagues (1986) study, explored judgments of children after their behavior was observed over time. In contrast, the current study investigated first impressions that both childcare providers and college students had about children based only on a photograph.

Perhaps the classic example of research on attractiveness biases toward children is the experiment by Dion (1972) in which women rated transgressions in school boys and girls. Participants received a photo of a child and a description of the child's behavior, supposedly from the journal of that child's second grade school teacher. Transgressions ranged from mild (stepping on a sleeping dog's tail) to severe (throwing rocks at a dog). Regardless of how severe the negative behavior, individuals perceived the attractive children as less likely to commit future transgressions, compared to the unattractive children. Clearly physical attractiveness is an influencing factor when judging others, but little research to date has explored the pervasiveness of this bias, and whether it exists equally in different types of perceivers.

Perceived Socioeconomic Status

In addition to physical attractiveness, the current research also investigated the potential biasing factor of perceived socioeconomic status (SES). Less work exists on this construct, compared to physical attractiveness. In one study, Stevens (1980) found that ethnicity and SES produced halo effects on teachers' ratings. Videotapes showed Caucasian, Mexican, and African American children, with SES also manipulated to show either middle-class or lower-class children. Participants evaluated the behaviors of African American and poor children as more deviant than Caucasian and

middle-class children, though there were no differences in actual behavior. Although ethnicity and SES may often be related in individuals' perceptions of others, the current study explored only perceptions of SES.

Labels put on children, such as "rich" or "poor," may affect how others interpret those children's behaviors. A "behavioral confirmation effect" was suggested by Darley and Gross (1983): When people have expectations about another person, the interaction with this person is contaminated with expectancy-confirming behaviors. In support of this idea, Lord, Ross, and Lepper (1979) found that when participants viewed expectancy-inconsistent information, they ignored this information and did not weigh it properly when they later evaluated the individual, causing the evaluation to be more a reflection of the perceivers' biases than a depiction of the actual person. There have been additional studies conducted that show there is no actual correlation between the confidence individuals have in their judgments and accuracy in the judgments themselves (e.g., DePaulo, Charlton, Cooper, Lindsay, & Muhlenbruck, 1997). Murrone and Gynther (1989) reported that by changing only the label of how intelligent a child is said to be, expectations for the child changed. This finding shows an expectancy-inconsistent information effect, because participants watched the same video and saw differences only because they were expecting the child to be at a different level of intelligence. The expectancy-inconsistent information effect is dangerous because if teachers, parents, social workers, and other people with whom children interact use the labels placed on a child to make judgments, some children will be denied a fair chance and will be treated accordingly.

Foster and Ysseldyke (1976) also explored bias in teachers when they tested if teachers were biased by the deviant labels assigned to children. These different labels were "emotionally disturbed," "mentally retarded," or "learning disabled." When participants rated a hypothetical child with one of these labels, and subsequently rated a "normal" child they viewed afterwards, the label effects carried over. Participants saw things that were not present and that were characteristic of the given label. These results suggest that teachers have negative biases toward children with deviancy labels, and they may then misinterpret normal child behavior because of it. Although much of the past research on the treatment of children based on appearance has focused on school teachers, daycare workers are just as relevant, but have not been studied in the extant research. Because daycare workers may be the first full- time adults to whom children are exposed outside of the family, their treatment of those children may have a powerful effect, and therefore are worthy of study.

Darley and Gross (1983) found that people would try to not use SES when making inferences about another person. However, when participants saw children performing an activity, they saw things that were related to what participants had been told about the SES of those children. For example, when participants believed a child was of high SES and then evaluated that child on an ability-relevant performance, par-

ticipants believed the child was performing at a high ability level. However, another sample of participants viewed the exact same video but the child had a label of low SES; these participants believed the child performed at a much lower ability level. In short, perceived SES influenced some individuals; children from low SES are expected to display negative behaviors (Stevens, 1980). Previous research indicates that people will make inferences about children based on preconceived beliefs about what children are like and overlook factors that contradict those beliefs. Based on the research, Hypothesis 1 in the current study was that target children from perceived high SES backgrounds will be rated more positively than children from perceived low SES backgrounds.

The attractiveness bias, or halo effects, has not been clearly researched in children. There is an attractiveness bias shown in adults, both young and old. When shown photographs, participants thought people who were more attractive were more socially desirable than their unattractive match (Perlini et al., 1999). More physically attractive people were even thought to live happier and fuller lives (Dion, Berscheid, & Walster, 1972). There is reason to believe this bias would apply to children as well. Therefore, Hypothesis 2 of the current study was that a child who is physically attractive will be rated more positively than a child who is unattractive.

Additional Factors

In spite of these biases, training could also make a large difference. Research has shown that in some professional contexts, specific training to avoid bias can be successful. For example, Correll et al. (2007) compared police to a community sample to see if there were differences in accuracy and speed for a shooting situation when deciding if a target person has a gun or not. Instructions asked participants to "shoot" the target if he had a gun; comparing reactions toward both White and Black targets allowed for investigation of potential racial bias. Police officers were much more accurate in the shooting situation compared to a community sample; officers were better at deciphering if there was a gun and were less "trigger-happy." Police were also less likely to shoot a Black target who did not have a gun. In short, non-trained community participants showed a bias such that they were more likely to shoot Black targets, even when those targets were unarmed. These results do not necessarily imply that police officers are not racially biased; rather, police simply are trained, and this training has enhanced their accuracy (Correll et al., 2007). Perhaps the training that daycare workers receive also positively benefits them by reducing any biases they may show. Although training across different daycare facilities is potentially variable, a discussion of treating all children equally is hopefully a common denominator in training for this profession. Therefore, Hypothesis 3 stated when rating photographs of children, daycare workers will be more objective than college students because of the nature of their work, training, and daily interaction with children.

Social desirability is the need people have to fit in or feel accepted. People try to achieve social desirability by only

behaving in culturally acceptable ways (Crowne & Marlowe, 1960). Biases based on appearance are generally not "politically correct" in the U.S. today, perhaps especially when those biases are applied to children. Therefore, Hypothesis 4 was that social desirability scores would be positively correlated with ratings for children of low SES, because participants will wish to appear unbiased.

Finally, Aronson and Worchel (1966) showed that people are drawn to others who are similar to themselves. People also want people like themselves to succeed (Byrne, Clore, & Smeaton, 1986). Thus, individuals from a low SES may rate another person from a low SES as more likely to succeed compared to raters from a high SES. Therefore, Hypothesis 5 was that participants would rate children of similar backgrounds to themselves more positively.

Method

Pretest

Participants and procedure

A pretest identified photographs of children perceived to be of high and low physical attractiveness and of high and low SES. Thirty-four undergraduate students (10 men, 24 women) participated; 91.43% identified as White, with a mean age of 20.32 years ($SD = 4.37$, range of 18 years to 44 years). Participants viewed photographs of children who were in first or second grade, taken from public domain internet websites. All participants received the same packet that consisted of a consent form and 65 photographs of female children who appeared to be of Caucasian ethnicity (we chose to stay with one race in the targets to avoid additional confounding variables). The photographs were on sheets of paper; all were the same size and showed each girl from the elbow up in a straight on face shot. There were nine photographs per page. Participants rated each photograph on two scales to measure the perceived attractiveness and SES of the child with 7-point Likert scales, ranging from 1 (*very unattractive*) to 7 (*very attractive*) and 1 (*poor*) to 7 (*rich*).

Results

Several repeated measures ANOVAs compared pretest ratings on SES and attractiveness. For SES, the two photos with the highest and lowest mean ratings were compared. The high SES photo ($M = 6.00$, $SD = 1.30$) was rated as significantly "richer" than the low SES photo ($M = 2.88$, $SD = 0.77$), $F(1, 33) = 152.46$, $p < .0001$. Similarly, the high attractive photo ($M = 5.70$, $SD = 1.49$) was rated as significantly more attractive than the low attractive photo ($M = 2.09$, $SD = 0.83$), $F(1, 32) = 191.04$, $p < .0001$.[1]

Main Experiment

Participants

Two groups of participants completed the study. The first group was 96 undergraduate students (48 men, 44, women, 4 unknown) attending a Midwestern university in the United States. The students were enrolled in general psychology and business courses and received extra credit for participating.

The racial breakdown was as follows: 85.57% identified as White, 2.06% as African American, 4.12% as Asian, and 7.22% identified as other or did not respond. The mean age of the participants was 20.27 years ($SD = 3.77$) with a range of 18 to 45 years. Participants reported the current socioeconomic status of their immediate family; 8.70% were between $0 and $18,000; 14.13% were between $18,000 and $30,000; 21.74% were between 30,000 and $45,000; 30.43% were between $45,000 and $70,000; 20.65% were between $70,000 and $100,000; and 4.35% were $100,000 and above.

The second group consisted of daycare workers employed at daycare facilities in Midwest Iowa. We contacted participants through their place of employment. One hundred and ten different daycare workers from two different professional facilities received photographs and surveys in the mail. Seventy-nine workers responded by returning the completed survey, for a response rate of 72%. Seventy of the daycare participants were women and 3 were men (6 participants did not indicate their sex). The racial breakdown was as follows: 83.54% identified as White, 3.80% as Hispanic, 1.27% as African American, 1.27% as Asian, and 8.25% identified as other or did not respond. The mean age of the participants was 34.91 years (SD = 14.19) with a range of 17 to 65 years. Participants reported their current socioeconomic status; 25.76% were between $0 and $18,000; 18.18% were between $18,000 and $30,000; 21.21% were between 30,000 and $45,000; 21.21% were between $45,000 and $70,000; 9.09% were between $70,000 and $100,000; and 4.55% were $100,000 and above.

Materials

Independent variable. Participants randomly received one of four photographs that were identical in layout and varied by perceived attractiveness and SES, as identified in the pretest. Thus, four conditions existed: (a) High SES, (b) Low SES, (c) High attractive, (d) Low attractive.

Dependent variables. Participants rated their target child on 10 descriptive traits, generated by the authors, all on a 7-point Likert scale, ranging from 1 (*very unlikely*) to 7 (*very likely*). There were five negative traits (disruptive, aggressive, belligerent, active, and defiant) and five positive traits (happy, warm, pleasant, attentive, cooperative, and controlled). After reverse coding the negative items, the mean of all items served as a summary variable. Internal consistency was good, with alpha = .87 for the items.

Social Desirability. The Marlow-Crowne social desirability scale used in this study was created to measure social desirability from the point of view of college students in particular and to eliminate pathology-relevant item content found in past social desirability scales. This scale defined social desirability to refer to participants' need to "obtain

---

[1]Originally the authors' intention was that means for the attractiveness variable would be independent of the means for the SES variable, to eliminate the confound of having the two photos be different on both variables simultaneously. Unfortunately, the pretest ratings did not allow for this possibility. Photographs rated as higher on attractiveness also received higher SES ratings, and photographs rated as lower on attractiveness also received lower SES ratings.

approval by responding in a culturally appropriate and acceptable manner" (Crowne & Marlowe, 1960, p. 353). This scale served the current study by measuring how much influence social desirability had on participants' answers. Participants responded to twelve items (e.g., "I never hesitate to go out of my way to help someone in trouble") and circled whether the item was true or false. After reverse coding half the items, the sum of items served as a composite variable. The mean social desirability for this sample was 5.73 ($SD =$ 2.55), with a range of 1 to 11 (out of 12 possible). Internal consistency was acceptable, alpha = .64.

Procedure

For the student group, the survey occurred in a classroom setting. The four target photographs were randomly assigned, and participants had 30 min to complete the survey. Most participants completed the survey within 12 min. Following the conclusion of the survey, we thanked and debriefed all participants.

For the professional group of daycare workers, we mailed surveys to the place of business in packets that included a cover letter, consent form, and the target photograph for each participant. Photographs were therefore randomly assigned. The cover letter invited the recipient to complete the enclosed survey to help researchers better understand the ability to anticipate how children will react to daycare. The letter also gave the participants access to the researcher's contact information if they desired a full debriefing.

After rating the photographs, all participants completed the Marlow-Crowne (1961) scale to assess their social desirability and a demographics sheet.

Results

Hypothesis 1

The first hypothesis expected participants to rate target children from high SES backgrounds more positively than children from low SES backgrounds. The opposite occurred; participants rated the high SES photograph more negatively ($M = 42.81$, $SD = 9.39$) than the low SES photograph ($M = 51.15$, $SD = 7.28$); this difference was significant, $t(82) = 4.531$, $p < .0001$.

Hypothesis 2

The second hypothesis predicted that participants would rate physically attractive children more positively than unattractive children. Results, however, showed no significant difference in ratings of the high attractive photograph ($M = 52.71$, $SD = 9.39$) than the low attractive photograph ($M = 51.69$, $SD = 7.91$), $t(90) = .563$, $p = .575$.

Hypothesis 3

We predicted that when rating photographs of children, daycare workers would be more objective than college students because of the nature of their work, training, and their daily interaction with children. To test this hypothesis, we examined participants' rating on each of the traits. Each time

the participant marked a "4," this indicated "neutral" on the scale. We calculated the number of neutral ratings for each person; to support the hypothesis, daycare workers should have more neutral ratings than college students. This trend would indicate that daycare workers are aware of the problems associated with judging a child's behavioral traits based simply on a photograph, and are thus unwilling to make these judgments. As expected, there was a significant difference in the number of neutral ratings provided by daycare workers ($M = 3.01$, $SD = 3.19$) compared to students ($M = 1.55$, $SD = 1.59$), and this difference was significant, $t(111) = -3.73$, $p = .0003$.

Hypothesis 4

We hypothesized that social desirability scores would be positively correlated with ratings for children of low SES, because participants will wish to appear unbiased. There was a significant correlation; however, it was in the opposite direction of the hypothesis, $r(174) = -.38$, $p = .01$. Thus, participants who wanted to present themselves as socially desirable rated the child of low SES more negatively.

Hypothesis 5

We also expected that participants would rate children of similar backgrounds to themselves more positively. To test this bias, we created a "matching" variable. Participants reported their current SES level (or for students, the current SES of their immediate family) by choosing one of six categories; the top three (anything above $45,000, n = 33) were re-categorized as "high" SES, and the bottom three (anything below $45,000, n = 44) were re-categorized as "low" SES. When participants indicated their own, current SES was high and also viewed the high SES photograph, we labeled this combination a "match." Similarly, participants with a low current SES and viewed the low SES photograph were a match. The other two combinations were considered "mismatches." There was no difference in positive impressions of the photograph in participants with a match ($M = 46.15$, $SD = 10.73$) than participants with a mismatch ($M = 47.39$, $SD = 8.31$); this difference was not significant, $t(75) = .562$, $p = .575$. Thus, the results did not support Hypothesis 5.

Discussion

Previous research has established that individuals rate adults more positively based on only their appearance (Johnson & Vidulich, 1956). We expected to find the same pattern for children. In addition, we expected that individuals would rate children from high SES backgrounds more positively than children from low SES backgrounds. Surprisingly, the results did not support these hypotheses. This pattern may have happened because when rating an adult, a person does not feel as guilty as when rating a child. Thus, when rating a child, individuals may be less inclined to make truthful ratings or may actually work against their stereotypes, thus resulting in the child of low SES being rated more positively than the child of high SES.

We also expected that a child who was physically attractive would be rated more positively than a child who was unattractive. Although results showed a very slight trend in the predicted direction, the difference was far from significance. Again, it is possible that when rating a child, adults try to have an open mind; they may not want to pass judgments on children because they believe a child is more innocent and still a blank slate, so to speak. Perhaps, participants guessed the hypothesis and answered according to demand characteristics, but this possibility is reduced due to the between-subjects nature of the experimental design.

We also predicted that daycare workers would be more objective than college students because of the nature of their work, training, and their daily interaction with children. Support for this trend was found, and may indicate that daycare workers are aware of the problems associated with judging a child's behavioral traits based simply on a photograph, and are thus unwilling to make these judgments. Some of the daycare workers actually wrote on their survey that they were unable to know about these traits solely based on a photograph. None of the college students showed the same behavior. Note, however, that it is also possible that this result came not from a unique perspective or training, but simply from age and maturity. The daycare workers may simply be more experienced with issues such as discrimination, and therefore their responses were tempered. Another possibility for these results is that the daycare workers were older and more mature; perhaps maturity is the variable of interest more than, or in addition to, specific training. Finally, it is possible that the daycare workers were parents themselves, and thus were more reticent to make judgments of children due to the ability to empathize with their own. Future research could explore differential effects of these additional variables.

Next, we expected that social desirability scores would be positively correlated with ratings for children of low SES, because participants would wish to appear unbiased. Surprisingly, the association went in the opposite direction: Participants who scored highly on social desirability rated the child of low SES more negatively. Possibly, instead of social desirability leading to feelings of guilt (and thus high ratings for the child), these individuals wished to "obtain approval by responding in a culturally appropriate and acceptable manner," as Crowne and Marlowe (1960, p. 353) expected in their original explanation of social desirability. In short, in this case perhaps participants are aligning with cultural stereotypes and think that they are supposed to rate this child more harshly.

A limitation of this study is that the survey did not tell the participants the SES of the children in a straightforward manner (i.e., the participants had to guess). Although the pretest established that the photographs were perceived in significantly different ways, participants may have changed their answers if provided with a specific economic condition for each child. Perhaps future research can explore this possibility by giving participants more explicit information, or at least explore the ability of individuals to infer the SES of someone based on photographs.

The current study investigated the main effect of perceived SES and the main effect of physical attractiveness in judgments of children. We expected these two constructs to interact. Therefore, originally a hypothesis of the study had been that trait ratings on photographs of low SES children would improve if the child were high in attractiveness. We expected the opposite for unattractive children of low SES; they were expected to be rated more negatively because they were both from a low SES and unattractive. Children who are both high SES and attractive should have been rated the most positively. Unfortunately, we did not test this trend because we were unable to find pictures that had the same score on SES and varied by level of attractiveness, and vice versa. This lack of pairing is an interesting limitation, because it shows that attractiveness and SES are unfailingly intertwined. Over 65 different photographs, highly attractive children were invariably judged to be of a higher economic class, and unattractive children were always considered to be poor. This juxtaposition of variables is interesting because the two factors can exist outside one another, but people as a rule attribute attractiveness to people who have money and unattractiveness to people who are poor.

Future research could take on the question of how perceptions of children affect their future behaviors. When children are labeled, they may in fact live up to the expectations of the label; this effect is well known in psychology as a self-fulfilling prophecy (cf. Snyder, 1982). One study (Snyder, Tanke, & Berscheid, 1977) showed that when men had telephone conversations with women they believed were physically attractive, the women responded to men's expectations by acting in a more friendly, sociable way. An example of perceptions affecting children can be found in the classic study by Rosenthal and Jacobson (1968). Here, teachers were told that five children in their classroom had been identified as "gifted" (in fact, the children were chosen at random). Over the course of the school year, the "gifted" children excelled, presumably in response to their teachers' expectations. Although the self-fulfilling prophecy is beyond the scope of the current research, future work should explore how judgments and perceptions from daycare workers affect the children in their care.

The current research is especially relevant and important to individuals in the area of childcare, as well as any other setting involving interactions with children. All children have the right to be judged on only their own merit and not be pigeonholed based on their looks. This basic right holds, regardless of whether the judgments are positive or negative. Future research should also vary the picture by sex or by race to see if people judge male children or children of minority races differently than they do White, female children. This procedure might show the stability of a halo effect on children, and if the effect is more or less likely with children of different backgrounds. Research on halo effects is vast, but lacking in the area of how this phenomenon affects children. Further research on children and halo effects will benefit children and society as a whole. In order to correct for halo

effects in children, we need to know more about them.

One interpretation of the results found here is that there is optimistic hope for children in daycare settings; the professional daycare workers who participated in the present study were reluctant to make judgments of children based simply on appearance. This reluctance may be due to experience, on-the-job training, or maturity. Similar trends might be found in other settings relevant to child care, such as preschools, after-school programs, children's museums, and the like. If the halo effect for children is negligible or dissipating, children of all shapes and sizes may have the hope and expectation of being treated equally.

References

Aronson, E. & Worchel, P. (1966). Similarity versus liking as determinants of interpersonal Attractiveness. *Psychonomic Science, 5,* 157-158.

Byrne, D., Clore, G. L., & Smeaton, G. (1986). The attraction hypothesis: Do similar attitudes affect anything? *Journal of Personality and Social Psychology, 51,* 1167-1170.

Correll, J., Park, B., Judd, C. M., Wittenbrink, B., Sadler, M. S., & Keesee, T. (2007). Across the thin line: Police officers and racial bias in the decision to shoot. *Journal of Personality and Social Psychology, 92,* 1006-1023.

Crowne, D., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, *24,* 349-354.

Darley, J. M., & Gross, P. H. (1983). A hypothesis-confirming bias in labeling effects. *Journal of Personality and Social Psychology, 44,* 20-33.

DePaulo, B. M., Charlton, K., Cooper, H,, Lindsay, J. J., & Muhlenbruck, L. (1997). The accuracy-confidence correlation in the detection of deception. *Personality and Social Psychology Review, 1,* 346-357.

Dion, K. K. (1972). Physical attractiveness and evaluation of children's transgressions. *Journal of Personality and Social Psychology, 24,* 207-213.

Dion, K. K., Berscheid, E., & Walster, E. (1972). What is beautiful is good. *Journal of Personality and Social Psychology, 24,* 285-290.

Foster, G. G., & Ysseldyke, J. (1976). Expectancy and halo effects as a result of artificially induced teacher bias. *Contemporary Educational Psychology, 1*, 37-45.

Jackson, D. A., & King, A. R. (2004). Gender differences in the effects of oppositional behavior on teacher ratings of ADHD symptoms. *Journal of Abnormal Child Psychology, 32*, 215-224.

Johnson, D. M., & Vidulich, R. N (1956). Experimental manipulation of halo effect. *The Journal of Applied Psychology, 40,* 130-134.

Lord, C. G., Ross, L., & Lepper, M. R. (1979). Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence. *Journal of Personality and Social Psychology, 37,* 2098-2109.

Masip, J., Garrido, E., & Herrero, C. (2003). Facial appearance and judgments of credibility: The effects of facial babyishness and age on statement credibility. *Genetic, Social, and General Psychology Monographs, 129*, 269-311.

Masip, J., Garrido, E., & Herrero, C. (2004). Facial appearance and impressions of credibility: The effects of facial babyishness and age on person perception. *International Journal of Psychology, 39*, 276-289.

Murrone, J., & Gynther, M. D. (1989). Implicit theories or halo effect? Conceptions about children's intelligence. *Psychological Reports, 65,* 1187-1193.

Perlini, A. H., Bertolissi, S., & Lind, D. L. (1999). The effects of women's age and physical appearance on evaluations of attractiveness and social desirability. *Journal of Social Psychology, 139*, 343-354.

Rosenthal, R., & Jacobson, L. (1968). *Pygmalion in the classroom: Teacher expectation and pupils' intellectual development.* New York: Holt, Rinehart & Winston.

Schachar, R. J., Sandberg, S., & Rutter, M. (1986). Agreement between teachers' ratings and observations of hyperactivity, inattentiveness, and defiance. *Journal of Abnormal Child Psychology, 14,* 331-345.

Snyder, M. (1982). Self-fulfilling stereotypes. *Psychology Today, 7,* 60-68.

Snyder, M., Tanke, E. D., & Berscheid, E. (1977). Social perception and interpersonal behavior: On the self-fulfilling nature of social stereotypes. *Journal of Personality and Social Psychology, 35,* 656-666.

Stevens, G. (1980). Bias in attributions of positive and negative behavior in children by school psychologists, teachers, and parents. *Perceptual and Motor Skills, 50,* 1283-1290.

Political Orientation, Party Affiliation, Religion, and Views on Stem Cell Research

Alison E. Collier

University of San Diego

Abstract

This study examined political party affiliation and political orientation and their relationship to attitudes toward stem cell research. Ninety-two participants (43 Democrats, 23 Republicans, and 26 independents) completed questionnaires surveying knowledge of and attitudes toward stem cell research. There was no difference among political party affiliations on knowledge of or attitudes toward the research. However, both liberals and moderates had significantly more positive attitudes toward stem cell research than did conservatives. The study also showed a significant positive correlation between knowledge of and attitudes toward stem cell research, and no significant difference on these measures between Christians and non-religious participants. Future research should include a broader range of religious groups as well as individuals who have undergone stem cell transplants.

Keywords: stem cell research

Discussion of stem cell research, a contentious topic of debate over the last decade, continues due to a constantly increasing advance of technology. In 2001, the controversy over human embryonic stem cell research arrived at the top of the U.S. political agenda when President Bush announced federal funding would be limited to research using only existing stem cell lines (Nisbet, 2004). President Bush permitted National Institutes of Health (NIH) funds for research from approximately 74 stem cell lines existing at that point in time. The cells came from embryos left over from in-vitro fertilization (IVF; Wertz, 2002). In fiscal year 2005, the NIH spent 40 million dollars on human embryonic stem cell research and 198 million dollars for research on different types of human stem cells (Okie, 2006).

Stem cells can serve a central function in the maintenance and regeneration of organs and tissue throughout a person's life, and researchers predict that in the future stem cells will be used to treat a number of diseases, including different types of cancer, Parkinson's disease, spinal cord injuries, and muscle damage (Nisbet, 2004). Despite the fact that stem cell research has led to significant medical advances (e.g., stem cell transplants in treatment of lymphoma and leukemia; American Cancer Society, 2007), there remains significant social and scientific uncertainty concerning the issue of stem cell research.

One extreme view of stem cell research is that the moral status of human embryonic stem cells is no different from any other random collection of cells from the human body and that to delay research is unethical. Therefore, one would argue that stem cell research is morally acceptable to uncover cures for life-threatening diseases (Kalichman, Hinman, & Snyder, 2006). Advocates of this argument have suggested that those opposing this research discount the suffering of millions who are afflicted with currently untreatable illnesses (Kalichman & Hinman, 2005).

The other extreme view is that, from the moment of conception, the embryo should have full moral standing as a person. Consequently, it is considered unethical to sacrifice the life of one individual for the benefit of another (Kalichman et al., 2006). Most people embracing this viewpoint argue that stem cell research is morally unacceptable if it requires the destruction of human embryos. For this reason, they argue that even though embryonic stem cells may well be effective in curing many diseases, the end does not justify the means. As a result, one could argue that although the research may achieve great advances in medicine, such progress is not justified if it violates fundamental human rights (Phil & Sandel, 2004.)

People with convictions between these two extremes tend to disagree on the subject of the moral standing of fetuses (Outka, 2002). However, many individuals agree with the opinion that embryos should not be created solely for the purpose of destroying them to benefit a third party. A person with a more moderate view would, generally, be inclined to consider stem cells derived from adults as necessary but not sufficient. As a result, there is currently no adequate or satisfactory substitute for embryonic stem cells (Outka, 2002).

Advocacy for stem cell research is growing in popularity. In the year 2000, only 20% of Americans reported closely following the issue of stem cell research to some extent. After the conflict over existing stem cell lines in the summer of 2001, approximately 40% of Americans indicated some knowledge of the stem cell debate (Nisbet, 2004). Following a slight downward shift in support for this research in 2002 (Nisbet, 2005), the Pew Research Center (2005) found significant gains in support for stem cell research during the years 2002-2004. Sixty-eight percent of people who had received information and educated themselves about the issue indicated their support for the research (The Pew Research Center, 2005).

In a nationwide sample of adults, the Pew Research Center for the People and the Press (2005) found that 56% of respondents indicated it was more important to conduct stem cell research that can potentially lead the way for many different cures than to avoid destroying human embryos. Only 32% of respondents believed preserving the potential life of embryos was more important than supporting the research (The Pew Research Center, 2005). In addition, polls revealed that public support for embryonic stem cell research increased by 13 percentage points between 2002 and 2004 (Okie, 2006).

General Attitudes

The stem cell research debate is irrevocably linked with attitudes toward abortion, individual values, religion, race and politics. Nisbet (2005), reporting survey data from 2,122 American respondents, concluded that people with more restrictive views on abortion rights are less likely to support embryonic stem cell research.

A poll of 1,022 adults conducted by TNS Intersearch in June 2001 determined that 54% of Roman Catholics favored advancement of stem cell research, 50% of white evangelical Protestants supported the research, and 76% of pro-choice individuals favored the research. Interestingly, this poll discovered that the only identifiable group to oppose stem cell research was African-Americans (Robinson, 2003). Apparently, although many Christians favor stem cell research, some do not favor the creation of an embryo for the purpose of extracting stem cells. Thus some Catholics and evangelical Christians view scientists, in this circumstance, as performing the role of God (Nisbet, 2005).

Robinson (2003) reported data from a survey of 1,010 randomly selected adults and established that 56% of pro-lifers favored stem cell research and that 57% of pro-lifers favored NIH funding. Another poll indicated that, when asked which area of research had the greatest promise for discovering new treatments for disease, 22% of the public declared that embryonic stem cell research had the greatest promise, 17% stated adult stem cell research had the greatest promise, and 25% believed using stem cells from other sources was the best approach (Nisbet, 2007).

In a survey of public opinion about stem cell research, Nisbet (2004) discovered approximately 4% of people believed stem cell research is not morally wrong but may be unnecessary, 35% of people believed stem cell research is not morally wrong and may be necessary, 34% of people believed stem cell research is morally wrong but may be necessary, and 20% of people believed stem cell research is morally wrong and unnecessary. Nisbet (2004) also found that 37% favor, 21% somewhat favor, 11% strongly oppose and 21% somewhat oppose embryonic stem cell research.

Political Party Affiliation and Attitudes

Democratic attitudes

In general, Democrats tend to support funding of stem cell research for medical research purposes, and this position was set forth in the 2004 Democratic platform. The Pew Research Center (2005) found that 80% of liberal Democrats viewed abortion as a very important issue, and ABC polls similarly discovered that roughly 80% of Democrats are likely to support stem-cell research. Likewise, about 75% of liberals and moderates are more prone to support stem cell research than are conservatives (Langer, 2007)

Republican attitudes

In general, the Republican party is divided on the issue of stem cell research. The Pew Research Center (2005) found that only one-third of conservative Republicans believe it is important to conduct stem cell research, whereas approximately 55% of all Republicans oppose the research (Langer, 2007)

Independent attitudes

TNS Intersearch found that 62% of independent voters favored stem cell research and that 63% of adults describing themselves as moderates approved of the research (Robinson, 2003). Similarly, ABC polls found that approximately 70% of independents supported stem cell research (Langer, 2007).

In view of the importance of political and religious views on attitudes toward stem cell research, I designed the current study to extend knowledge of the role of political and religious perspectives in our understanding of attitudes and knowledge about stem cell research. This study specifically examined participants' political party preference (i.e., Democratic, Republican or independent) and their attitudes toward and knowledge of stem cell research. I further examined whether participants considered themselves liberal, moderate or conservative in their political orientation and what influence this belief system had on their opinions of stem cell research. I also examined the relationship between knowledge of stem cell research and attitudes toward it, as well as possible differences between Christian and nonreligious participants.

Based on previous research, I hypothesized that participants with a Democratic party affiliation or those who considered themselves independent would be more supportive of stem cell research than participants with a Republican affiliation, but that there would be no differences in knowledge about stem cell research across political parties or philosophies. In addition, I hypothesized that liberal and moderate participants would be more likely than conservative participants to favor stem cell research. Finally, consistent with previous polls (The Pew Research Center, 2005), I hypothesized knowledge of stem cell research would be positively correlated with support for such research, and that nonreligious people would be more supportive than Christians.

Method

Participants

Participants were 92 student volunteers from the University of San Diego. Forty-three indicated they were affiliated with the Democratic party, 23 considered themselves Republicans, and 26 considered themselves independent. Participants included members of Young Democrats and Young Republicans, and students in introductory psychology classes. Participants were between the ages of 18 and 24 years ($M = 20.6$). The sample included 31 males and 61 females of various ethnic backgrounds and religious viewpoints. However, most participants (79) reported being Christian or practicing no religion. The remaining 13 participants reported several other religions; due to the small numbers, I deleted their data from analyses involving religion.

Alison E. Collier

Materials and Procedure

The participants completed a questionnaire about their political party affiliation and their convictions on stem cell research. The questionnaire consisted of 26 questions. Of the 26 questions, 10 were demographic, 6 probed knowledge of stem cell research, and 10 asked about participants' personal attitudes toward stem cell research.

The knowledge-based questions were self-estimates requiring a yes or no answer, or a Likert-type response (e.g., 1 = *no knowledge*, 5 = *lots of knowledge*). Examples of knowledge-based questions include "Before today have you heard of embryonic stem cells?", "Do you know what stem cells are used for in medicine today?", and "Do you know where stem cells come from?" Knowledge-based scores could range from 0 to 18.

The attitude-based questions asked for answers on a five-point Likert-type scale. The scale ranged from 1 (*strongly disapprove*) to 5 (*strongly approve*). Examples include "Do you believe in doing research on stem cells in humans?", "Do you believe the United States federal government should fund stem cell research?", "Would you allow the use of stem cells if they came from the patient's own blood?", and "Would you allow the use of stem cells if they came from the blood of another person?" The different questions asked for participants' views concerning stem cell transplants, embryonic stem cells, and the idea of stem cells from in-vitro fertilization. Moreover, the questions addressed the participants' views of stem cell research involving animals and humans. Opinion scores could range from 0 to 50.

Before completing the questionnaire, participants received a consent form explaining the voluntary nature of the study and a reminder that they could withdraw at any time. Upon completing the questionnaires, the participants returned them to the researcher for analysis.

I calculated a one-way ANOVA across political affiliations (Democratic, Republican, and independent) for attitude scores, and a separate one-way ANOVA across the same groups for knowledge scores. I also calculated one-way ANOVAs comparing knowledge and attitude scores of conservatives, moderates, and liberals on stem cell research. I used independent-samples *t*-tests to compare mean knowledge scores and attitude scores between nonreligious and Christian groups. Finally, I examined the correlation between knowledge of stem cell research and attitudes toward stem cell research.

Results

Total knowledge scores ranged from 7 to 16, with higher scores reflecting more self-reported knowledge about stem cell research. The total attitude scores ranged from 16 to 43, with higher scores reflecting a more positive attitude toward stem cell research.

The one-way ANOVAs across political party affiliations (Democrat, Republican, or independent) showed no significant differences for knowledge scores or for attitude scores.

However, a one-way ANOVA across political orientations (liberal, moderate, or conservative) revealed a significant difference in attitudes, $F(2,87)= 10.60$, $p = .001$, $\eta^2 = .11$, with post hoc analysis (Tukey) showing a significant difference between the conservative and liberal orientations ($p < .001$), and between the conservative and moderate orientations ($p < .001$). In each case, conservative participants showed a less favorable attitude toward stem cell research. However, there was no significant difference between liberal and moderate orientations (see Table 1).

Table 1

Mean Scores of Stem Cell Research Attitude Scale and Knowledge Associated with Political Orientation

| | Political Orientation | | |
	Conservative	Moderate	Liberal
Attitudes Mean(SD)	24.3[a](4.8)	31.3[b](5.6)	33.4[b](4.3)
Knowledge Mean(SD)	12.8[a](1.7)	12.5[a](2.3)	13.0[a](2.1)

NOTE: Means with different superscripts are significantly different at the *p* < .001 level.

An independent-samples *t*-test comparing mean knowledge scores of non-religious participants and those affiliated with a Christian religion revealed no significant difference. Likewise, a *t*-test showed no significant difference in attitude scores between the same groups. However, the non-religious group did have a slightly (but not significantly) higher attitude score (see Table 2).

Table 2

Non-Significantly Different Mean Scores of Stem Cell Research Attitude Scale and Knowledge Associated with Religious Views

| | Religious View | |
	Non-religious	Christian
Attitudes Mean(SD)	30.9(5.0)	32.3(5.3)
Knowledge Mean(SD)	12.4(2.9)	12.7(2.0)

Finally, the correlation between knowledge and attitudes toward stem cell research was significant, $r(88) = .29$, $p = .01$. In general, the more knowledgeable a person felt about stem cell research, the more positive their attitude toward such research.

Discussion

The purpose of this study was to determine whether there is a connection between a person's political orientation or

political party affiliation and their attitudes and familiarity concerning stem cell research. I also sought to examine whether having no religious views or having Christian views was related to attitudes and knowledge about stem cell research. Finally, I attempted to determine whether there is a correlation between knowledge of and attitudes toward this new area of scientific endeavor.

The results of this study are to some extent consistent with prior research (Langer, 2007; Robinson, 2003; The Pew Research Center, 2005) showing political perspective related to attitudes concerning stem cell research. However, my hypothesis that the attitudes of Democrats and Independents would be more supportive than those of Republicans was not supported. Furthermore, my hypothesis that there would be no difference in knowledge among the three political groups was supported.

The data confirmed my hypothesis that self-reported liberals and moderates would be more likely than conservatives to support stem cell research, but did not support my prediction that non-religious participants would be more supportive than Christians.

Finally, there is a modest positive correlation between self-reported knowledge of stem cell research and attitudes toward stem cell research. This finding supports my hypothesis that the more knowledgeable a person is about stem cell research, the more likely he or she will have a positive attitude about the research.

In general, the total self-reported knowledge scores are relatively low, although attitude scores indicate strong convictions and beliefs on the subject of stem cell research. This result could indicate that several additional factors other than knowledge of the subject may influence the participants' decisions. For example, some people may cling to a negative view of stem cell research due to media coverage or information disseminated by political or religious organizations (Nisbet, 2005). However, when people acquire more knowledge on the subject of stem cell research, they appear to exhibit an inclination to support further investigation in this arena.

The study is limited by the fact that all participants were students at a private Catholic university enrolling largely middle to upper class Caucasian students. Thus, it is difficult to generalize the data to a greater population. Additionally, completion of multiple analyses likely increased, at least slightly, the chance of introducing Type I errors in the calculations.

Future research should examine views concerning stem cell research among people of different religions and ethnic groups. For example, it would be interesting to include a sufficient number of participants to allow analysis of the role of Muslim, Buddhist, or Jewish religious affiliation. Further research could also examine factors influencing knowledge of stem cell research, and it would be useful to study the attitudes of people who have had a stem cell transplant compared to those who have not.

The topic of stem cell research is related to many other factors, such as views on religion and politics. As technology advances, ethical debates continue to arise. Stem cell research is one such debate that is likely to continue for many years to come.

References

American Cancer Society (2007). Detailed Guide: Leukemia – Chronic Lymphocytic (CLL) Bone arrow or Pericpheral Blood Stem Cell Transplantation. Retrieved February 3, 2009, from http://www.cancer.org/docroot/CRI/content/CRI_2_4_4X_Stem_Cell_Transplantation_62.asp.

Kalichman, W. M., & Hinman, M. L. (2005). Consensus and the search for pluripotent stem cells. *Stem Cell Reviews*, *1,* 287.

Kalichman, W. M., Hinman, M. L., & Snyder, Y. E. (2006).Can science resolve the ethical impasse in stem cell research? *Nature Biotechnology*, *24*, 397-400.

Langer, G. (2007). Stem cell research: The president vs. public opinion. *ABC News Polling Unit*. Retrieved June 10, 2008, from http://blogs.abcnews.com/thenumber/2007/06/stem_cell_resea.html.

Nisbet, M. C. (2004). Public opinion about stem cell research and human cloning. *Public Opinion Quarterly*, *68*, 131-154.

Nisbet, M. C. (2005). The competition for worldviews: Values, information, and public support for stem cell research. *International Journal of Public Opinion Research*, *17*, 90-109.

Nisbet, M. C. (2007). Political communication in the 2007 stem cell debate: Framing messages and defining public opinion. *Science and the Media.* Retrieved February 3, 2009, from http://www.csicop.org/scienceandmedia/stem-cell/2007.html.

Okie, S. (2006). Stem-cell politics. *The New England Journal of Medicine*, *355*, 1633-1637.

Outka, G. (2002). The ethics of human stem cell research. *Kennedy Institute of Ethics Journal*, *12*, 175-213.

The Pew Research Center For The People & The Press. (2005, August). *Strong support for stem cell research*. Washington D.C.: Author.

Phil, D., & Sandel, J. M. (2004). Embryo ethics – The moral logic of stem-cell research. *New England Journal of Medicine*, *351*, 207-209.

Robinson, B. A. (2003). Politics of extracting new stem cell lines. *Ontario Consultants on Religious Tolerance*. Retrieved June 10, 2008, from http://www.religioustolerance.org/res_stem5.htm.

Wertz, C.D. (2002). Embryo and stem cell research in the United States: History and politics. *Gene Therapy*, *9*, 674-678.

Victim Impact Statements, Aggravating vs. Mitigating Circumstances, and Juror Attitudes in a Capital Sentencing Decision

Heather M. Caspers[1] and Wind Goodfriend*[2]

[1]University of Northern Iowa; [2]Buena Vista University

Abstract

The present study examined the influence of victim impact statements, the presence of aggravating and mitigating circumstances, and attitudes toward the death penalty to see the effect these factors had in perceptions of a capital case. Students were given a first degree murder trial summary with a guilty verdict already established. Results indicated that the victim impact statement and the aggravating and mitigating circumstances did not affect the sentencing decision, but pre-existing attitudes about the death penalty in general affected participant decisions for the target defendant. In addition, important sex and academic major differences were investigated. Implications for these findings within the criminal justice system are discussed.

Keywords: victim impact statement, death penalty attitudes, aggravating/mitigating circumstances

Imagine the following courtroom scene: a defendant in a murder trial has just been pronounced guilty. A grieving family speaks out about how their lives have changed forever, a criminal's life hangs in the balance, and a jury poises to render a judgment of whether this criminal should live or die. This situation may be extreme, but it is one with which the criminal justice system is struggling. Many criminal justice professional—specifically victim's rights groups—believe that the surviving family members should be allowed to make a statement about how they have been affected by the death of a loved one in trials involving murder (Myers & Greene, 2004). However, others believe that victims should not be allowed to speak because they could potentially bias the jury into rendering a harsher judgment during the sentencing phase of a trial (Myers & Greene, 2004). Allowing victims or their families to discuss their financial losses or the physical and psychological trouble they have suffered at the hands of the defendant is referred to as a *victim impact statement*. Victim impact statements have been contested in the Supreme Court, with two cases resulting in victim impact evidence to be considered irrelevant to sentencing decisions in capital cases [Booth v. Maryland (1987) and South Carolina v. Gathers (1989) as cited in Myers & Greene, 2004].

In 1991, these precedents were reversed in *Payne v. Tennessee*, which established that the victim's suffering was relevant to sentencing decisions (Myers & Greene, 2004). Because this information can be presented to jurors, it is important to examine how victim impact evidence influences jurors' decisions.

Other factors that influence sentencing decisions in capital trials are whether jurors oppose the death penalty and the presence of aggravating and mitigating circumstances in the crime. *Aggravating* circumstances are facts of the case that tend to increase the harshness of the sentencing judgment, such as a prior criminal record, and *mitigating* circumstances are facts that tend to decrease the harshness of the sentencing judgment, such as the defendant has mental health problems (Rabe & Champion, 2004). Normally, victim impact statements are introduced during sentencing, and aggravating and mitigating circumstances are introduced during the course of the trial. However, it is possible that all of these factors can arise during sentencing, and these factors can potentially affect jurors in a capital case. All of these factors can potentially affect the outcome of sentencing in a capital case. The purpose of the current research was to see how each factor (i.e., victim impact statements, attitudes toward the death penalty, and aggravating vs. mitigating circumstances) interact to influence a sentencing decision.

Previous research on the effects of two of these factors has shown some relevant results. Gordon and Brodsky (2007) examined the influence of victim impact statements and mitigating circumstances. Trial information from the case *Payne v. Tennessee* was provided to participants; results indicated that the presence of victim impact statements led to harsher sentencing. However, other factors affected the sentencing decision, as well. Mitigating factors that included mental health issues were well accepted by the mock jurors, and the jurors were willing to be more lenient in the presence of these factors. The victim impact statement was thought to be somewhat influential with 33% of the participants (Gordon & Brodsky, 2007). Mitigating factors and victim impact statements were used together in this research; further research has examined the influence of aggravating circumstances.

Luginbuhl and Burkhead (1995) examined the role of victim impact statements and aggravating circumstances. This research looked at what effect a victim impact statement had in regard to a moderately aggravated murder or a severely aggravated murder. Here, results indicated that those participants who read a victim impact statement voted for the death penalty for both types of crimes. The victim impact statements also had the most influence on those participants who already supported the death penalty (Luginbuhl & Burkhead, 1995).

Another study by Luginbuhl and Middendorf (1988) focused exclusively on aggravating and mitigating factors in a trial. Their first experiment found a strong association between jurors who were strongly opposed to the death penalty, and how they perceived mitigating circumstances. However,

there was no relationship between death penalty attitudes and aggravating circumstances. In the second experiment, "death-scrupled" jurors, or jurors who were opposed to the death penalty and would be excluded in capital trials, did not accept aggravating circumstances (Luginbuhl & Middendorf, 1988).

More specific research has focused solely on victim impact statements. Myers, Lynn, and Arbuthnot (1998) hypothesized that victim impact evidence would result in increased sentencing judgments. In addition, they suggested that harm information—along with emotionality exhibited by the witness—would also affect sentencing judgments. These researchers found the harm sustained by victims' relatives affected the mock juries more than their emotional state. These findings supported earlier research that victim impact statements affect sentencing decisions (Myers et al., 1998).

Another study that examined the effects of the type of information in the victim impact statement was conducted by Myers, Godwin, Latter, and Winstanley (2004). They examined the effects of dehumanizing language about the defendant and humanizing language used to describe the victim in victim impact statements. The researchers hypothesized that both humanizing and dehumanizing language (tested separately) would lead to more participants voting for the death penalty. Surprisingly, neither variable affected sentencing judgments. They also found that victim impact statements did not affect the sentencing judgments. An explanation for this finding was that many more participants were willing to impose the death penalty than participants in previous studies (Myers et al., 2004).

Manipulating evidence strength and the presence of a victim impact statement was examined by Myers and Arbuthnot (1999). Jurors who were exposed to victim impact evidence were more than twice as likely to impose the death penalty. These findings support the notion that victim impact statements lead to harsher sentencing in capital cases.

A study that focused on victim and offender gender along with a victim impact statement was done by FosterLee, Fox, FosterLee, and Ho (2004). One of the major findings from this research was the victim impact statement affected sentencing for the female offender more than the male offender. Without the victim impact statement, women were sentenced more leniently, but when it was included, the sentences were statistically equal (FosterLee et al., 2004).

Besides victim impact statements and the presence of aggravating and mitigating circumstances, sentencing judgments are also affected by jurors' attitudes. McKelvie (2006) found people who were supportive of the death penalty were harsher in sentencing. Bernard and Dwyer (1984) found that attitudes toward the death penalty affect sentencing, but not determination of guilt. Konecni, Ebbesen, and Hock (1996) examined strength of evidence with regard to death-qualification and juror biases; jurors tended to simply follow the strength of evidence. Allen, Mabry, and McKelton (1998) conducted a meta-analysis of all studies pertaining to juror attitudes and the death penalty. The most important finding was that pro-death penalty attitudes were related to a higher tendency to convict a defendant.

The purpose of the present study was to expand previous research by combining the presence of a victim impact statement and the influence of aggravating and mitigating circumstances in a capital case. Previous research studies have looked at each of these factors separately. Luginbuhl and Burkhead (1995) examined victim impact statements in regard to a severely aggravated murder or a moderately aggravated murder. Gordon and Brodsky (2007) focused on victim impact statements and mitigating circumstances. The present study used *both* aggravating and mitigating circumstances; in addition, this study used varying levels of this variable in the *sentencing* phase of the trial, not the guilt phase, because guilt will already be established in the trial materials. The presence of the victim impact statement was also be manipulated. Finally, attitudes toward the death penalty were also measured to examine the relationship between death penalty attitudes and votes for the death penalty. In short, this experiment is the first of its kind to combine all of these constructs.

College students were used in this research as a convenience sample, but also because their attitudes toward the criminal justice system and their views on punishment are important to understand for the future of the criminal justice system. In addition, it was also important to examine the perceptions of criminal justice majors to see if they hold different views on sentencing, due to their possible future involvement in the criminal justice system, which early evidence suggests (Lambert et al., 2008). Finally, gender was another variable of interest, considering extant research that has found important gender differences in attitudes toward the death penalty (Robbers, 2006).

Hypotheses

Six hypotheses were proposed:

Hypothesis 1: Regardless of condition, participants who are opposed to the death penalty will be less likely to vote for the defendant to receive the death penalty, and participants who are supportive of the death penalty will be more likely to vote for the defendant to be put to death. The basis of this hypothesis was from a meta-analysis on juror attitudes and sentencing decisions (Allen et al., 1998).

Hypothesis 2: The presence of a victim impact statement in the sentencing phase of the trial will increase sentencing judgments as compared to not having a victim impact statement present. Many earlier studies have found that the presence of a victim impact statement does increase sentencing judgments (Luginbuhl & Burkhead, 1995; Myers & Arbuthnot, 1999; Myers et al., 1998).

Hypothesis 3: There will be no differences in the sentencing judgments between men and women. Previous studies have not found differences in judgments between men and women in their sentencing decisions, in spite of sex differences in death penalty attitudes (Robbers, 2006).

Hypothesis 4: Criminal justice majors will give out harsher

sentencing judgments than other majors. The rationale of this hypothesis is that because of their choice of major, many criminal justice students may have harsher views on crime and the death penalty (Lambert et al., 2008).

Hypothesis 5: More aggravating circumstances presented in the sentencing phase will lead to harsher punishments and more votes for the death penalty, as compared to mitigating circumstances. Previous research has found that aggravating circumstances increase sentencing judgments (Butler & Moran, 2007; Luginbuhl & Middendorf, 1988).

Hypothesis 6: Jurors who oppose the death penalty are more likely to accept mitigating circumstances and not vote for the death penalty. This hypothesis is a replication of Luginbuhl and Middendorf's (1988) previous study .

Finally, several variables were included in the study for exploratory purposes. Other issues involved in a capital trial include jurors' perceived suffering of the family, perceptions of the level of suffering the family experienced compared to other families, how harshly the defendant should be punished, and how much compassion jurors felt for the defendant. Although no specific hypotheses were suggested for these variables, because they are relevant to juror decision making, they were measured for additional analyses after hypothesis testing was complete. Major and participant sex differences on these variables were tested, and the results are described below.

Method

Participants

This study used 93 students from introductory psychology and criminology classes (used to maintain a generalized sample) and 46 criminal justice majors from a small, private, Midwestern university (total N = 140 with 65 men and 75 women; 1 participant did not indicate a major). There were a total of 54 criminal justice majors at this university; thus 85% of them participated. Students were offered extra credit for their participation. Participants were asked to provide demographic information; ethnicity was as follows: 89.3% White, 2.9% Hispanic, 3.6% Black, 2.9% Asian, and .7% as other. The mean age of the participants was 19.96 years (*SD* = 1.66).

Materials

Independent variables. Participants were assigned to one of four conditions: (1) victim impact statement, aggravating circumstances; (2) victim impact statement, mitigating circumstances; (3) no victim impact statement, aggravating circumstances; or (4) no victim impact statement, mitigating circumstances. This resulted in a 2 (aggravating vs. mitigating) X 2 (presence/absence of victim impact statement) factorial design. All participants were asked to read a trial summary based on *Payne v. Tennessee*. The trial materials (i.e., trial summary, victim impact statement, and scales) used in this study were from previous research by Bryan Myers (Myers et al., 2004). The aggravating circumstances were the statements: "Mr. Payne has a history of violence and a prior

criminal record. He was on probation when this crime took place." The mitigating circumstances were the statement: "Mr. Payne has no prior criminal record and has a history of mental illness." See the Appendix for the victim impact statement.

Death penalty attitudes. A single item assessed participants' attitudes regarding the death penalty. The question assessed whether a juror would be willing to impose the death penalty in *any* case ("Is it your belief that as a juror you would never be willing to impose the death penalty in any case, no matter what the evidence was, **or** would you be willing to consider voting to impose the death penalty in some cases?").

Dependent variables. After reading the trial summary, participants were asked to provide a sentence decision for the defendant and indicate their perceptions of suffering for the family. They were also asked to indicate their belief that the defendant should be sentenced as harshly as possible. Participants were given the option to sentence the defendant to life in prison without parole or death by lethal injection.

In all the conditions, participants were asked to indicate how much suffering the surviving family members were experiencing on a 7-point Likert scale ranging from 1 (*none*) to 7 (*a great deal*). Participants were also asked to indicate the level of suffering the family members were experiencing compared to other families on a 5-point Likert scale ranging from 1 (*a good deal less*) to 5 (*a good deal more*). Next, they were also asked to indicate their feelings about whether the defendant should be punished as harshly as possible on a 10-point Likert scale ranging from 1 (*disagree strongly*) to 10 (*agree strongly*). Finally, participants indicated how much compassion they felt for the defendant on a 7-point Likert scale ranging from 1 (*none*) to 7 (*a great deal*). Each of these variables was analyzed separately.

Results

Prior to computing any statistical analyses, a Chi-square test of independence was conducted to see the sentencing decision based on condition. To test the null hypothesis that condition had no effect, it was expected that frequencies would be identical in all conditions. However, testing showed marginal significance, with $\chi^2(3) = 6.10$, $p = ..104$.

The votes based on condition can be seen in Table 1. Also, if participants answered that they could not impose the death penalty in any case, they were excluded from a second Chi-square test of independence (again, with the null expectation of equal frequencies by condition). This test was significant, $\chi^2(3) = 12.10$, $p = .007$ (see Table 1 for observed frequencies).

Hypothesis 1

The first hypothesis stated that participants who were opposed to the death penalty would be less willing to impose it, compared to those who accept the death penalty. As expected, a Chi-square test revealed a significant difference.

Table 1

Frequency of Votes For and Against the Death Penalty, Based on Condition

	All Participants					Participants Willing to Vote for Death Penalty			
Condition	Life	%	Death	%		Life	%	Death	%
Victim Impact Statement Present									
Aggravating n = 32, 23	13	40.6	19	59.4		5	21.7	18	78.3
Mitigating n = 35, 29	21	60.0	14	40.0		17	58.6	12	41.4
Victim Impact Statement Absent									
Aggravating n = 34, 20	21	61.8	13	38.2		9	45.0	11	55.0
Mitigating n = 39, 30	19	48.7	20	51.3		11	36.7	19	63.3

Note. In the condition column, two sample sizes are listed. The first is the condition size when all participants were included; the second is the condition size when only those willing to impose the death penalty were included.

Participants who were against the death penalty in general were less likely to impose it in this specific case (frequency = 30), compared to participants who were willing to impose the death penalty (frequency = 61). This difference was tested against the null of expected equal frequencies, and it was significant, $\chi^2(1) = 18.16$, $p < .001$. Thus, Hypothesis 1 was supported.

Hypothesis 2

The second hypothesis expected that the presence of a victim impact statement would increase sentencing judgments as compared to not having a victim impact statement present. A Chi-square test was conducted to test Hypothesis 2. The frequency of votes for death in conditions with a victim impact statement was 33, whereas the frequency of votes for death in conditions without a victim impact statement was 33. This difference was not significant, with $\chi^2(1) = .23$, $p = .63$. Thus, Hypothesis 2 was not supported.

Hypothesis 3

In the third hypothesis, no significant differences were expected between the sentencing judgments of men and women. A Chi-square was used to compare these two groups, and it was found that there was not a significant difference, $\chi^2(1) = 1.30$, $p = .25$. Men voted for the death penalty (frequency = 34) just as often as women did (frequency = 32). Therefore, Hypothesis 3 was supported.

Hypothesis 4

Hypothesis 4 stated that criminal justice students would give out harsher sentencing judgments than other participants. Again, a Chi-square was used to compare these two groups of participants, and there was not a significant difference, $\chi^2(1) = .09$, $p = .76$. Criminal justice majors voted for the death penalty (frequency = 21, which is 45.6% of these majors) just as often as non-criminal justice majors (frequency = 45, which is 48.4%). Thus, Hypothesis 4 was not supported.

Hypothesis 5

The fifth hypothesis conjectured that more aggravating circumstances presented in the sentencing phase would lead to more votes for the death penalty as compared to the presence of mitigating circumstances. A Chi-square was conducted to test this hypothesis, with $\chi^2(1) = .09$, $p = .76$. Frequency of death votes under mitigating circumstances (frequency = 34) was equal to votes under aggravating circumstances (frequency = 32). Hypothesis 5 was not supported.

Hypothesis 6

Finally, the sixth hypothesis expected that jurors who opposed the death penalty would be more likely to accept mitigating circumstances and vote for life in prison (instead of death), compared to those who read aggravating circumstances. In other words, this is a replication of Hypothesis 5, but only participants against the death penalty were included in this analysis. A Chi-square compared frequencies for the vote variable for just these participants, comparing votes in the mitigating versus aggravating circumstances conditions. The participants who read mitigating circumstances were more likely to vote for life in prison (frequency = 29) compared to those who read aggravating circumstances (frequency = 23). However, this difference was not significant, $\chi^2(1) = .03$, $p = .87$. Although frequencies were in the expected direction, Hypothesis 6 was not supported.

Additional Analyses

To summarize the pattern of results thus far, it seems that neither victim impact statements nor aggravating versus mitigating circumstances had significant effects on participants' decisions regarding their votes for or against the death penalty in the case. The exception to this was in Condition 1, the condition that included both the victim impact statement and aggravating circumstances (in other words, the most severe condition) led to more votes for the death penalty.

Additional analyses were conducted, beyond the hypotheses, to investigate any other interesting results. First, a significant interaction was found between major and circumstances for vote, $F(1, 101) = 4.52$, $p = .036$. Here, dummy coding was used such that a "1" indicated life in prison votes and "2" indicated death votes (so that higher group means indicate harsher decisions). The mean for criminal justice students was 1.81 for aggravating circumstances ($SD = .40$) and 1.35 for mitigating circumstances ($SD = .49$). Thus, criminal justice majors were more likely to vote for the death penalty when aggravating circumstances were present compared to mitigating circumstances. Both criminal justice and non-criminal justice students were less likely to vote for the death penalty when mitigating circumstances were present. However, this difference was significant for criminal justice majors, and not significant for all other majors. The mean for other majors was 1.62 for aggravating circumstances ($SD = .50$), and 1.60 for mitigating circumstances ($SD = .50$). In short, criminal justice majors were more able to distinguish between the two sets of circumstances. This result may be because of their training/coursework in the field.

In addition to the death penalty vote, all participants were asked questions concerning the suffering of the family, the level of suffering the family experienced compared to other families, how harshly the defendant should be punished, and how much compassion they felt for the defendant. See Table 2 for means and standard deviations for these variables. A series of one-way analyses was conducted on these variables testing the effects of both presence/absence of the victim impact statement and aggravating versus mitigating circumstances, and no significant differences were found (all $ps > .45$).

Further analysis did yield significant differences between majors and sex on these additional variables. A t-test compared majors on the suffering of the family, which found a significant effect, $t(70) = -2.05$, $p = .045$. Specifically, all other majors believed the family was suffering more ($M = 6.72$, $SD = .80$) than criminal justice majors did ($M = 6.35$, $SD = 1.10$). For the level of suffering the family experienced compared to other families, the groups were also significantly different, $t(116) = -2.31$, $p = .02$, such that all other majors believed the family was suffering more ($M = 3.44$, $SD = .70$) than criminal justice majors did ($M = 3.20$, $SD = .51$).

With regard to sex differences, men felt that the surviving family members were suffering more ($M = 3.53$, $SD = .78$) than women did ($M = 3.21$, $SD = .47$), $t(101) = 2.86$, $p = .005$. Men also believed that the defendant should be punished more harshly than women did, $t(138) = 2.04$, $p = .043$. The mean for men on this variable was 7.80 ($SD = 1.96$), whereas for women it was 7.05 ($SD = 2.32$). A two-way analysis of variance was conducted on the suffering of the family with major and sex as independent variables, with $F(1, 139) = 4.09$, $p = .045$ for major, $F(1, 139) = 4.42$, $p = .037$ for sex, and a significant interaction $F(1, 139) = 5.17$, $p = .025$. Female criminal justice majors perceived that the family was suffering more than male criminal justice majors. The mean for female criminal justice majors was 6.75 ($SD = .55$), whereas the mean for men criminal justice majors was 6.04 ($SD = 1.31$). This difference was significant, $p = .028$. However, the difference for all other majors was not significant, $p = .87$. Here, the mean for men was 6.74 ($SD = .76$), and the mean for women was 6.71 ($SD = .83$).

Discussion

As expected, one of the strongest predictors of votes for/against the death penalty in the target court case was pre-existing acceptance of the death penalty in general. Participants who stated that they would be unwilling to impose the

Table 2

Means and Standard Deviations for Suffering, Compassion, and Punishment

| | Victim Impact Statement Present | | | | Victim Impact Statement Absent | | | |
| | Aggravating | | Mitigating | | Aggravating | | Mitigating | |
Variable	M	SD	M	SD	M	SD	M	SD
Suffering	6.78	.659	6.57	.948	6.41	1.131	6.59	.910
Family Suffering	3.41	.615	3.26	.741	3.41	.657	3.37	.589
Compassion	1.78	1.128	2.03	1.294	1.79	1.366	2.05	1.395
Punishment	7.31	2.221	7.46	2.034	7.47	2.377	7.40	2.185

Note. Suffering Scale: 1 (*none*) to 7 (*a great deal*), Family Suffering: 1 (*a good deal less*) to 5 (*a good deal more*). Compassion: 1 (*none*) to 7 (*a great deal*), Punishment: (*disagree strongly*) to 10 (*agree strongly*)

death penalty in general were, logically, less likely to vote for the death penalty in this case. The opposite was also true. This finding was not surprising; however, several of the other results went contrary to expectations.

Interestingly, the victim impact statement did not impact the sentencing decision, as predicted by Hypothesis 2. Prior studies have found that the victim impact statement does increase the sentencing judgment (Luginbuhl & Burkhead, 1995; Myers & Arbuthnot, 1999; Myers et al., 1998), whereas the present study did not. Other studies have found a lack of effects from the victim impact statement (McGowan & Myers, 2004; Myers et al.,2004). Perhaps victim impact statements are not as powerful as criminal justice professionals fear. The evidence for the effect of the victim impact statement seems to be mixed. Some jurors may be affected by the victim impact statement, whereas others are not. More research needs to be conducted on victim impact statements and their influence on jurors' decision making before any conclusions can be drawn.

In terms of gender differences, it was expected that men and women would not differ in sentencing judgments, which was supported by the data. However, there were other significant differences between men and women. Women believed that the family was suffering more than men did (this was only true for criminal justice majors), whereas men believed that the defendant should be punished more than women did. However, when comparing the victim's family to other families, men believed that the family suffered more than women did. These results seem contradictory. If women believed that the family was suffering more than men did, it seems that they would also believe that the family was suffering more as compared to other families more than men did. However, this result was not supported. Perhaps the victim impact evidence did play a role here because that is where the participants read about the suffering of the family. There could be a gender difference in how the victim's family was perceived by men and women. Men did believe that the defendant should be punished more harshly than women did, which seems to provide support for male and female stereotypes. Men tended to be more aggressive in their sentencing judgments, whereas women were more sympathetic to the defendant.

Criminal justice majors were expected to be harsher on the defendant than all other majors. In the present study, criminal justice students were not harsher on defendants compared to other students. Although this difference between academic majors did not occur, the differences between the majors were revealed in other ways. The criminal justice majors believed that the victims were not suffering as much as other majors did. Perhaps this is the result of criminal justice coursework, where many different types of crimes may be discussed. Emphasis is placed on the victim, but perhaps more time is focused on the crime and why the defendant committed the crime rather than victims' needs. Either way, this finding is somewhat troubling for the future of the criminal justice system if we would want future criminal justice professionals to be sensitive to the victim's needs. However,

more research needs to be conducted on this variable before conclusions can be drawn due to the fact that the sample size consisted of only 46 students.

Hypothesis 5 was not supported, which stated that aggravating circumstances would lead to harsher sentencing judgments as compared to mitigating circumstances. This finding is in contrast to previous studies, which have found that aggravating circumstances increase the sentencing judgment (Butler & Moran, 2007; Luginbuhl & Middendorf, 1988). Hypothesis 6 was also not supported, not replicating Luginbuhl and Middendorf's (1988) study. Attitudes toward the death penalty affected the outcome more than the victim impact statement or the circumstances of the trial, as revealed by Hypothesis 1, except when the victim impact statement and aggravating circumstances were presented together.

Another important finding was that the Chi-square test on participants who were willing to impose the death penalty had a significant difference based on condition. Condition 1 (i.e., both the victim impact statement and aggravating circumstances) had the highest percent of votes for the death penalty at 78.3%, which indicates that participants were affected by both the victim impact statement and the aggravating circumstances. This condition was the harshest and received the most votes as predicted. Applying this to the "real world" criminal justice system, if a defendant has a great deal of aggravating circumstances present and the victim's family may be presenting a statement, it may be advisable to accept a plea bargain, due to the fear of higher votes for the death penalty under these circumstances.

The results of this study imply that there are many important individual differences in jurors that may affect how they perceive trials. For example, criminal justice students appeared "hardened" to the suffering of the family. Perhaps survivor suffering should be stressed in future classes of criminal justice majors, or other training should be provided to keep criminal justice professionals sensitive to the victim.

Implications for Future Research

Although more research needs to be continued on how victim impact statements and aggravating versus mitigating circumstances interact in trials, these results imply that the focus of future research should be attitudes toward the death penalty and individual differences such as gender or academic background (i.e., major in college). Future research should also focus on participants and their willingness to impose the death penalty. A variety of variables could be introduced to examine participants and their views on the death penalty, such as personality, religion, family values, and whether or not a participant has been the victim of a serious crime. Finally, this research was conducted in a state without the death penalty; replicating the experiment in states where the death penalty is allowed in courts may affect the results.

Conclusion

The judgment placed on a person convicted of a capital crime can be impacted by several factors or the different cir-

cumstances surrounding the trial. We found that attitudes toward the death penalty and the willingness to impose the death penalty were the predominant factors that affected the sentencing decision. The results of this study and others similar to it have important implications for many defendants and the criminal justice system in general. Researchers need to continue to conduct studies in this area, not only for the criminal justice system, but for the defendants and victims, to ensure they receive a trial with an impartial jury, and that they be allowed to speak about the damage they have suffered.

References

Allen, M., Mabry, E., & McKelton, D. M. (1998). Impact of juror attitudes about the death penalty on juror evaluations of guilt and punishment: A meta-analysis. *Law and Human Behavior*, *22*, 715-731.

Bernard, J. L., & Dwyer, W. O. (1984). Witherspoon v. Illinois: The court was right. *Law & Psychology Review*, *8*, 105-114.

Butler, B., & Moran, G. (2007). The impact of death qualification, belief in a just world, legal authoritarianism, and locus of control on venire persons' evaluations of aggravating and mitigating circumstances in capital trials. *Behavioral Sciences & the Law*, *25*, 57-68.

FosterLee, L., Fox, G. B., FosterLee, R., & Ho, R. (2004). The effects of a victim impact statement and gender on juror information processing in a criminal trial: Does the punishment fit the crime? *Australian Psychologist*, *39*, 57-67.

Gordon, T. M., & Brodsky, S. L. (2007). The influence of victim impact statements on sentencing in capital cases. *Journal of Forensic Psychology Practice*, *7*, 45-51.

Konecni, V. J., Ebbesen, E. B., & Hock, R. R. (1996). Factors affecting simulated jurors' decisions in capital cases. *Psychology, Crime, & Law*, *2*, 269-297.

Lambert, E. G., Hogan, N. L., Moore, B., Jenkins, M., Jiang, S., & Clarke, A. (2008). The death penalty attitudes of criminal justice students: Are they different from other students? *Criminal Justice Studies: A Critical Journal of Crime, Law, & Society*, *21*, 193-212.

Luginbuhl, J., & Burkhead, M. (1995). Victim impact evidence in a capital trial: Encouraging votes for death. *American Journal of Criminal Justice*, *20*, 1-16.

Luginbuhl, J., & Middendorf, K. (1988). Death penalty beliefs and jurors' responses to aggravating and mitigating circumstances in capital trials. *Law and Human Behavior*, *12*, 263-281.

McGowan, M. G., & Myers, B. (2004). Who is the victim anyway?: The effects of bystander victim impact statements on mock juror sentencing decisions. *Violence and Victims*, *19*, 357-374.

McKelvie, S. J. (2006). Attitude toward capital punishment is related to capital and non-capital sentencing. *North American Journal of Psychology*, *8*, 567-590.

Myers, B., & Arbuthnot, J. (1999). The effects of victim impact evidence on the verdicts and sentencing judgments of mock jurors. *Journal of Offender Rehabilitation*, *29*, 95-112.

Myers, B., Godwin, D., Latter, R., & Winstanley, S. (2004). Victim impact statements and mock juror sentencing: The impact of dehumanizing language on a death qualified sample. *American Journal of Forensic Psychology*, *22*, 39-55.

Myers, B., & Greene, E. (2004). The prejudicial nature of victim impact statements: Implications for capital sentencing policy. *Psychology, Public Policy, and Law, 10,* 492-515.

Myers, B., Lynn, S. J., & Arbuthnot, J. (1998). Victim impact testimony and juror judgments: The effects of harm information and witness demeanor. *Journal of Applied Social Psychology*, *32*, 2393-2412.

Rabe, G. A., & Champion, D. J. (2002). *Criminal Courts: Structure, Process, and Issues*. New Jersey: Prentice Hall.

Robbers, M. (2006). Tough-mindedness and fair play: Personality traits as predictors of attitudes toward the death penalty-an exploratory gendered study. *Punishment & Society*, *8*, 203-222.

Appendix

Victim Impact Statement

Judge: Your duty, as jurors, is to decide the appropriate punishment for Mr. Payne. The possible options for 1st degree murder are: (1) death by lethal injection, or (2) life in prison without the possibility of parole

Prosecutor: Ladies and gentlemen of the jury, the act of the defendant, Pervis Payne, took the life of two victims, and harmed many others. He murdered Jennie Thomas, along with her 3 year-old daughter, Lacie-Jo, and left 4 year-old Anthony for dead. Little Anthony will have to live with both the physical and emotional scars for the rest of his life. I want you to hear the testimony of Jennie's mother, Susan Thomas, who will tell you the damage left behind as a result of Pervis Payne's murderous acts. Mrs. Thomas, you may now read your statement to the court.

Susan Thomas: Thank you. I asked to address the jury because I'm afraid that people will not know the true damage this man has brought to our family. We were a close family. My daughter Jennie was one of the most special persons you could ever hope to meet. She was the light of my life. She survived an abusive relationship with her husband, and left him because she was afraid of what it might do to the kids. I was so proud of her. She was the best mother to her kids I ever saw. Both Lacie and Anthony absolutely worshipped their mother. She was warm-hearted, kind, and generous to people. There was not a person alive she wouldn't care for and help. She was a social worker because she loved people and she loved helping people. Now Jennie is gone. She was murdered. My granddaughter is gone. Lacie was the most special little person. A happy child. She was murdered as well. And now Anthony and I must go on living without the both of them. I'm not young. Anthony should not have to be raised by his grandmother. The boy needs his mother. Every night I can hear him in his bed, crying for his mother and his sister. I cry too. Sometimes we cry together. Why did they die? They are dead because some animal wanted sex from her and killed her when she tried to protect herself. This cold-blooded monster doesn't care about life because he's already dead. Anything that would murder a mother and her little daughter could possibly have any life in it. This was a savage act, brutally stabbing a defenseless mother and her two children. How can I possibly feel any sympathy for the defendant? I can't. I can't really tell you what I think should happen to this defendant. I wanted the chance to address you because I wanted you to see the damage the defendant has inflicted on our family. Damage I know we will never recover from.

Health Consequences of Exposure to Inner-City Violence

Faraz Ahmad

Creighton University

Abstract

This review discusses some of the latest studies addressing the health consequences of exposure to inner-city violence. More specifically, I explore the relationship between community violence and asthma morbidity and blood pressure among inner-city residents. Researchers have shown that exposure to violent acts can serve as a constant source of psychological stress, which contributes to increased asthma morbidity (Wright et al., 2004; Wright & Steinbach, 2001). Additionally, several studies have reported the adverse effects of violence on blood pressure (Clark, Benkert, & Flack, 2006; Krenichyn, Saegert, & Evans, 2001; Wilson Kliewer, Teasley, Plybon, & Sica, 2002). These findings suggest that attention and additional research are needed to better understand the health consequences of exposure to urban violence.

Keywords: health, inner-city violence

Research has explored the physical health consequences of high levels of exposure to violence. Previous research has demonstrated correlations between violence and increased psychological problems such as post-traumatic stress disorder (PTSD), depression, and aggression among inner-city residents (Gorman-Smith & Tolan, 1998; Mazza & Reynolds, 1999; Paxton, Robinson, Shah, & Schoeny, 2004). More recently, studies suggest that psychological problems may lead or contribute to physiological disorders and negatively affect recovery from physiological disorders (Clark et al., 2006; Mazza & Reynolds, 1999; Wilson et al., 2002; Wright et al., 2004; Wright & Steinbach, 2001). The present review discusses research linking community violence and poor mental and physical health, and advocates for increased attention to the serious health consequences of exposure to inner-city violence.

Community Violence

Exposure to serious forms of violence such as stabbings, shootings, and seeing dead bodies is prevalent among inner-city residents, including children and young adults. Previous studies have reported that approximately 85% of inner-city youth have personally witnessed a violent act and 70% have actually been victims of a violent act (Wilson et al., 2002). A study conducted in Philadelphia followed 119 inner-city children from birth. The researchers found that by age seven years, 75% had heard gun shots, 18% had seen a dead body, 10% had seen a shooting or stabbing in the home, and 61% worried some or a lot of the time that they might be killed (Hurt, Malmud, Brodsky, & Giannetta, 2001). Another study carried out in New York City among young inner-city boys found that 35% saw someone stabbed, 33% saw someone shot, 23% had seen a dead body in their neighborhood, and 25% had witnessed someone being killed (Miller, Wasserman, Neugebauer, Gorman-Smith, & Kamboukos, 1999).

Violence, Stress, and Asthma

Several recent studies have emerged that provide support for the view that community violence is correlated to asthma morbidity through psychological stress. One such study followed four different cases of inner-city teen patients from Boston who suffered from asthma. In each of these cases, exposure to violence led to increased asthma symptoms. In case 1, the patient's asthma symptoms had been stable for the past four months; however, after the patient heard gunshots outside of her home and learned that one of her peers had been fatally shot, she developed respiratory problems and had recurrent asthma attacks. In case 2, the patient had been physically attacked by a group of girls. Her asthma symptoms flared up when she encountered the group of girls who attacked her. Furthermore, the patient reported no acute asthma exacerbations during the 15-month incarceration period of her attackers. Interestingly, following her attackers' release the patient redeveloped severe asthma symptoms. As in case 1, the patient in case 3 had entered a period of relative stability with regards to her asthma. However, after being assaulted by an older boy and threatened by his cousin, the patient developed severe respiratory problems. In case 4, the patient was hospitalized for asthma exacerbation and was recovering well at the hospital until she witnessed a physical fight between her parents. The nurses observed that the patient's breathing and heart rate increased significantly along with decreased air movement and recurrent wheezing during the fight (Wright & Steinbach, 2001). In each of the cases presented, exposure to violent acts or fear of violence, triggered the patient's asthma symptoms, often requiring emergency treatment.

A later study by Wright and colleagues (2004) provided further support for the relationship between violence and asthma morbidity. This study was conducted from August 1998 to July 2001 in seven major U.S. cities and included 937 children suffering from asthma and their caretakers. Of those that participated, 28% of the children reported seeing a fight with a gun, 33% of the children saw a violent argument between neighbors, and 21% saw a robbery or mugging within the past six months prior to participating in the study. Using site-adjusted analyses, the researchers demonstrated a gradient increase in asthma-related-symptom days with increasing exposure to violence, even after adjusting for income, employment status, caretaker education, housing problems, and other adverse life events (Wright et al., 2004). According to the Wright and Steinbach (2001) and Wright and et al. (2004) studies, violence serves as a constant source of psychological stress, taxing vulnerable individuals and impairing normal physiological functioning among inner-city youths.

The relationship between violence and psychological stress has been well documented. A study by Mazza and Reynolds (1999) explored the relationship between exposure to violence among inner-city teens and PTSD. The study was conducted with 94 adolescents from a parochial school located in an inner-city neighborhood in Brooklyn, New York and in an area considered to be one of the most violent in the state. The study reported that 93% of the adolescents surveyed had been exposed to at least one violent act in the past year. Based on the results from hierarchical regression analyses, the researchers observed a distinct relationship between exposure to violence and PTSD symptoms; such as recurrent recollections of the traumatic event, feelings of detachment, sleep difficulty, and outbursts of anger (Mazza & Reynolds, 1999). Their findings supported past studies that suggest exposure to violence is a strong predictor of PTSD among inner-city youths.

Psychological stress is associated with activation and abnormal regulation of the hypothalamic-pituitary-adrenal (HPA) axis (Wright et al., 2004). Long-term stress can alter cortisol and catecholamine patterns in the body, which can increase the risk of inflammatory disorders and contribute to asthma morbidity. Wright and Steinbach (2001) discussed past studies showing that stress can alter the immune system, which may increase the vulnerability of the respiratory tract to infection and trigger acute asthma exacerbations. Furthermore, stress affects the secretion of cytokines that play a critical role in inflammatory diseases such as asthma. Changes in cytokine expression and inflammatory mediators may also increase a genetically predisposed individual's risk of suffering from asthma. Additionally, abnormal parasympathetic response, which is associated with prolonged stressful experiences such as exposure to violence, can increase smooth muscle tone in the lung and induce bronchoconstriction in asthma patients. Thus, based on their research and the findings of others, Wright and Steinbach (2001) believe that violence serves as a psychological stressor that can affect normal physiological function, which not only aggravates asthma symptoms, but possibly increases a genetically predisposed individual's risk of developing the disease.

Wright et al.'s study (2004) also explored the effects of violence on the behavior of caretakers of children suffering from asthma. They recorded that 38% of caretakers reported being afraid their child could be a victim of neighborhood violence, and 34% said they kept their child indoors to limit their exposure to violence. A graded relationship was observed between exposure to violence and certain caretaker behaviors, such as, smoking, keeping their children indoors, and skipping medication. The authors of the paper argued that psychological stress due to community violence affected caretakers' behavior and further contributed to the children's increased asthma symptoms (Wright et al., 2004).

This argument was supported by the researchers reporting that the caretakers felt less in control and overwhelmed by unwanted thoughts and memories related to negative events – a sign of stress (Wright et al., 2004). Previous studies suggest that poor adherence to medication caused by fear of exposure to violence and/or a sense of helplessness in a hostile environment may contribute to increased asthma morbidity. Many of the caretakers and their children in past studies found it difficult to keep medical appointments, go to the pharmacy, or follow prescribed exercise programs out of fear of encountering community violence (Fong, 1995; Robicsek, Ribbeck, & Walker, 1993). To further complicate matters, high-violence areas may have fewer primary care and asthma specialty clinics serving the community and pharmacies may be open for limited hours (Robicsek et al., 1993).

As mentioned previously, exposure to violence was associated with specific changes in caretaker behavior that may have contributed to asthma morbidity. For example, keeping children indoors to protect them – as many of the caretakers in Wright et al.'s (2004) study did – has been shown to increase a child's risk of suffering from obesity, a factor linked to asthma (Gortmacker et al., 1996; Stenius-Aarniala et al., 2000). Another effect of being kept indoors is that it increases an individual's exposure to asthma-causing aeroallergens. Additionally, caregiver stress due to the fear of violence may influence stress response among children, which in turn leads children to adopt less effective copping strategies and further contributes to increased asthma symptoms (Wright et al., 2004).

Violence and Blood Pressure

Several studies have been conducted to investigate the effects of violence on inner-city residents' blood pressure. A recent study by Wilson and colleagues (2002) involving 56 Black adolescents from Richmond, Virginia was carried out to explore this relationship. By measuring participants' mean blood pressures (MBP) and assessing their level of exposure to violence as determined by the Richters and Saltzman's Survey of Exposure to Community Violence, researchers demonstrated that being physically involved in a violent act is positively associated with mean blood pressure (MBP) nondipping status. An explanation for this observation is that violence can affect catecholamine levels, which may impact blood pressure (Wilson et al., 2002). As mentioned earlier in the present review, violence is correlated to increased psychological stress. This exposure can cause the HPA axis to increase the production of cortisol and greater automatic arousal due to greater levels of epinephrine, which can lead to higher blood pressure (Lynch, 2003).

In fact, Wilson et al.'s (2002) study found that teenage boys showed higher incidence of MBP nondipping status and increased levels of daytime epinephrine and norepinephrine excretion compared to teenage girls. Previous studies have shown that inner-city boys are exposed to more violent acts and are more likely to remember and talk about violence, further increasing their level of exposure. This finding may explain why boys have higher daytime epinephrine levels and blood pressure compared to their female counterparts (Wilson et al., 2002). However, this hypothesis requires further investigation, because in the same study it was also observed that increased daytime epinephrine levels did not directly mediate MBP nondipping status in boys or girls who

reported only hearing about violence. Thus, future research should attempt to see if it is possible that the physiological mechanisms leading to increased cardiovascular function differs significantly depending on whether an individual is directly involved in a violent act or indirectly hears about such a crime. Nonetheless, regardless of the physiological mechanism, the findings from this study are important, because a high MBP nondipping status as a teenager increases one's risk for developing hypertension as an adult, which has a number of health problems associated with it (Wilson et al., 2002).

Two other studies have also reported on the correlation between violence and blood pressure, but produced results that were different from Wilson et al.'s (2002) findings. A 2001 study surveyed 40 children from New York City's East Harlem neighborhood (Krenichyn et al., 2001). The researchers noted that more than half of the children reported hearing a gunshot, witnessing an arrest, seeing drug transactions, and seeing someone being assaulted. Interestingly, after measuring cardiovascular function the researchers discovered that increased exposure to violence was associated with *lower* cardiovascular function. Contrary to Wilson et al.'s (2002) study, MBP was observed to decrease due to violence. Krenichyn and colleagues findings were in agreement with a more recent study conducted by Clark et al. (2006) involving 225 inner-city youths. As in previous studies, the participants were exposed to high levels of violence according to the Screen for Adolescent Violence Exposure scale. After monitoring participants' blood pressure, the researchers found that increased violence was associated with decreased systolic and diastolic blood pressure (Clark et al., 2006).

In both of these studies, the researchers attributed their observations to the participants showing a defeated coping response. Normally, violence elicits a flight or fight response involving the sympathetic nervous system, which increases blood pressure; however, prolonged exposure to high levels of violence and the individual accepting that he or she cannot control or change the circumstances leads to a defeated coping response and decreased cardiovascular function. However, it is unclear whether lower blood pressure alone due to a defeated coping response leads to any physiological damage. This area certainly requires more investigation. Furthermore, a passive response can lead to depression and other psychological problems affecting normal physiological functioning (Clark et al., 2006; Krenichyn et al., 2001). The conflicting findings of violence on blood pressure requires more research to gain a better understanding of the underlying causes of violence on blood pressure.

Conclusions and Future Directions

Several studies have reported on the effects of community violence on the health of inner-city residents. These studies' findings demonstrate that increased exposure to violent acts increases asthma morbidity and can affect blood pressure. Although these findings are compelling and argue for future research into the link between exposure to violence and health problems, case studies are limited in their generaliza-

bility. For instance, some argue it is difficult to generalize findings to the population as a whole, because case studies focus on specific individuals or tend to involve only a small segment of the population (Tellis, 1997). Additionally, cases dealing with behavior and health problems can be complex. When case studies are reported and analyzed, certain information may be unintentionally left out due to the researcher's approach, judgment, or inability to communicate all other factors that may have been involved in the cases. Thus, others reviewing the data collected by the researchers may present them in a different way. Nonetheless, case studies represent actual experiences and situations, and can shed light on complex inter-relationships (Hodkinson & Hodkinson, 2001). Furthermore, many previous medical and psychological research studies have successfully relied on case study methodology in order to gain a better understanding of specific human behaviors and health problems (Tellis, 1997).

Future studies are needed to better explain the conflicting findings between violence's effects on cardiovascular function and the physical mechanism by which cardiovascular function is impaired. Additionally, it would be beneficial to conduct large scale studies to observe before and after affects of asthma morbidity and cardiovascular function in inner-city communities to see if changes in levels of community violence have been associated with changes in health problems, such as, asthma, hypertension, and PTSD.

The studies discussed in this review represent some of the most in-depth inquiries into the link between inner-city violence and health. These studies strongly suggest that more information is needed to properly understand the effect of violence on not just asthma morbidity and cardiovascular function, but on other health disorders as well. For example, it would be interesting to see if exposure to urban violence decreases the recovery ability of those suffering from cancer or other chronic diseases. Past studies showed exposure to violence changes the behavior of individuals in regards to the amount of exercise they receive, their ability to adhere to medical advice, and psychological state (Clark et al., 2006; Fong, 1995; Krenichyn et al., 2001; Robicsek et al., 1993). This change in behavior may leave inner-city residents more susceptible to various health disorders or ability to recover from illnesses at a higher rate then the general population. Additionally, the studies that indicate that a large percentage of caretakers keep their child indoors to limit their exposure to violence, which increases a child's risk of suffering from obesity, would suggest not only an increase in a child's risk of suffering from asthma, but from other obesity-related health problems as well.

Based on the findings discussed in this review, which demonstrate an existing relationship between exposure to violence and health, it is strongly recommended that health professionals and policy makers should be aware of the serious health consequences of urban violence and find proper means to successfully address it. The relationship between inner-city violence and health is commonly thought of as an individuals' health suffering from gunshot wounds, stabbing, or a physical fight. However, physical health can be directly

and indirectly affected from exposure to violence and can lead to health problems. This negative impact on inner-city residents' physical and mental wellbeing can impair their ability to succeed in school or at work, to lift themselves out of poverty, or lead a happier life. Furthermore, the health consequences that have been discussed such as, abnormal cardiovascular function and obesity are examples of major health problems currently faced in society. These disorders, as well as some of the disorders associated with them, are expensive to treat and consume healthcare resources at a high rate (Center for Disease Control and Prevention, 2009; Public Health at a Glance, n.d.). Thus, it is important to work to end community violence that negatively impacts residents' physical and mental health for humanitarian, moral, and economical reasons.

References

Clark, R., Benkert, R. A., & Flack, J. M. (2006). Violence exposure and optimism predict task-inducted changes in blood pressure and pulse rate in a normotensive sample of inner-city black youth. *Psychosomatic Medicine, 68*, 73-79.

Center for Disease Control and Prevention. (August 19, 2009). Overweight and Obesity. Retrieved from http://www.cdc.gov/obesity/causes/economics.html.

Fong, R. (1995). Violence as a barrier to compliance for the hypertensive African-American. *Journal of the National Medical Association, 87*, 203-207.

Gorman-Smith, D. & Tolan, P. (1998). The role of exposure to community violence and developmental problems among inner-city youth. *Development and Psychopathology, 10*, 101-116.

Gortmacker, S., Must, A., Sobol, A., Peterson, K., Colditz, G., & Dietz, W. (1996). Television viewing as a cause of increasing obesity among children in the United States, 1986-1990. *Archives of Pediatrics & Adolescent Medicine*, *150*, 356-362.

Hodkinson, P. & Hodkinson, H. (2001). The strengths and limitations of case study research: Making an impact on policy and practice. Cambridge. Learning and Skills Development Agency conference.

Hurt, H., Malmud, E., Brodsky, N., & Giannetta, J. (2001). Exposure to violence: Psychological and academic correlates in child witnesses. *Archives of Pediatrics and Adolescent Medicine*, *155*, 1351-1356

Krenichyn, K., Saegert, S., & Evans, G. W. (2001). Parents as moderators of psychological and physiological correlates of inner-city children's exposure to violence. *Applied Developmental Psychology, 22*, 581-602.

Mazza, J. L. & Reynolds, W. M. (1999). Exposure to violence in young inner-city adolescents: Relationships with suicidal ideation, depression, and PTSD symptomatology – posttraumatic stress disorder. *Journal of Abnormal Child Psychology, 27*, 203-213.

Miller, L. S., Wasserman, G. A., Neugebauer, R., Gorman-Smith, D., & Kamboukos, D. (1999). Witnessed community violence and antisocial behavior in high-risk, urban boys. *Journal of Clinical Child Psychology, 28*, 2-10.

Paxton, K. C., Robinson, W. L., Shah S., & Schoeny, M.E. (2004). Psychological distress for African-American adolescent males: Exposure to community violence and social support as factors. *Child Psychiatry and Human Development, 34*, 281-295.

Public Health at a Glance. (n.d.). Cardiovascular Health. Retrieved from http://web.worldbank.org/WBSITE/EXTERNAL TOPICS/EXTHEALTHNUTRITIONANDPOPULATION /EXTPHAAG/0,,contentMDK:20588521~menuPK: 1314866~pagePK:64229817~piPK:64229743~theSitePK: 672263,00.html

Robicsek, R., Ribbeck, B., & Walker, L. (1993). The cost of violence: the economy of health care delivery for non-accidental trauma in an urban southeastern community. *North Carolina Medical Journal*, *54*, 578-582.

Stenius-Aarniala, B., Pousse, T., Kvarnstorm, J., Gronlund, E., Ylikahri, M., & Mustajoki, P. (2000). Immediate and long term effects of weight reduction in obese people with asthma: randomized controlled study. *BMJ, 320*, 827-832.

Tellis, W. (1997, July). Introduction to case study [68 paragraphs]. *The Qualitative Report* [On-line serial], *3*(2). Available: http://www.nova.edu/ssss/QR/QR3-2/tellis1.html .

Wilson, D. K., Kliewer, W., Teasley, N., Plybon, L., & Sica, D. A. (2002). Violence exposure, catecholamine excretion, and blood pressure nondipping status in African American male versus female adolescents. *Psychosomatic Medicine*, *64*, 906-915.

Wright, R. J., Mitchell, H., Visness, C. M., Cohen, S., Stout, J., Evans, R., & Gold, D. R. (2004). Community violence and asthma morbidity: the inner-city asthma study. *American Journal of Public Health*, *94*, 625-632.

Wright, R. J. & Steinbach, S. F. (2001). Violence: An unrecognized environmental exposure that may contribute to greater asthma morbidity in high risk inner-city populations – grand rounds in environmental medicine. *Environmental Health Perspectives, 109*, 1085-1089.

Special Features

Richard L. Miller and Robert F. Rycek

University of Nebraska at Kearney

The Special Features section provides a forum for three types of essays that should be of considerable interest to students and faculty. Students can address a variety of issues for subsequent issues of the Journal's Special Features sections. At the end of this issue, you can read about those topics: Evaluating Controversial Issues, Conducting Psychological Analyses—Dramatic, and Conducting Psychological Analyses—Current Events.

Psychological Analysis — Dramatic

Nurse Betty and Dissociative Fugue

Chelsea M. Cox

Creighton University

The film *Nurse Betty* is a comedic thriller that debuted at the turn of this century (Golin, Mutrux, & LaBute, 2000). The title doubles as the name of a popular soap opera star's character in the film and Renée Zellweger's new name and identity after she suffers from Dissociative Fugue. Dissociative Fugue is a rare stress disorder in which the sufferer dissociates, or separates, part of their memory, forgets or is confused about his or her personal identity, and suddenly travels away from his or her normal environment (Comer, 2007). Renée Zellweger begins the movie as Betty Sizemore, a sweet-natured diner waitress and homemaker from a small town in Kansas, and suddenly dissociates into the character Nurse Betty from her favorite soap opera *A Reason to Love*.

Betty Sizemore's obsession with *A Reason to Love* is showcased in the first scene of the film. She cannot take her eyes off a re-run on the diner's television and she is fixated on Dr. Ravell, the male lead character and heart surgeon of the show. Betty's diner friends throw her a little birthday celebration, but her best friend Sue Ann is too busy with her children to go out with Betty as she originally planned. Betty is a naively positive person and is not affected by the lack of celebration with Sue Ann or even her husband's controlling dialogue and negative comments. Perhaps her naiveté foreshadows a pattern of escape and avoidant coping that will culminate in her dissociative fugue.

Del, Betty's husband, brings potential used car clients to their home to discuss vehicle pricing, but the "clients" are actually two hit men hired to bring back a car Del purchased that happened to have drugs in the trunk. In the chaos of the scene Del is killed while Betty, who was watching *A Reason to Love* in the next room, witnesses his horrific death. Betty takes on the identity of Nurse Betty from *A Reason to Love* and decides to drive to California to reunite with her once lover, Dr. Ravell.

There are four features of Dissociative Fugue according to the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association [APA], 2000) beginning with the symptom of dissociation caused by a specific trigger and leading to problems with memory recall and unforeseen travel. Betty Sizemore experiences a sudden disturbance when she watches as her husband, Del, is scalped from the hair line to mid-scalp and shot twice, the second one being fatal. Betty is unable to remember her past correctly after the onset of Dissociative Fugue and recalls a strange mixture of true and false memories due to her dissociation (Calssen, Koopman, & Spiegel, 1993). Her lack of memory for her husband's death is a clear indication that her dissociation causes a disruption in her normal functioning beyond typical avoidance based coping (Badura, Reiter, Altmaier, Rhomberg, & Elas, 1997). When talking to a psychologist at the police department after the incident she cannot recall anything from the traumatic event she witnessed. She also calls her best friend from Kansas, Sue Ann, while passing through Arizona and says she hopes Del is well in her absence. She only unconsciously knows of his death and refuses to listen when Sue Ann tries to tell her otherwise. Betty cannot recall her recent past and has altered much of her life story to coincide with her new identity as Nurse Betty.

In addition to experiencing the dissociative amnesia highlighted above, Betty's symptoms indicate the proper diagnosis is Dissociative Fugue because she unexpectedly travels away from her home in Kansas and across the country to Los Angeles. In doing so she also separates herself from her customary place of work at the diner where she held a job as a waitress for about five years. After Betty watches her husband's murder, she takes on the character of Nurse Betty, packs for a trip, and takes the 'borrowed' Buick LeSabre, which is the car the hit men murdered Del over, to find Dr. Ravell. Her friends are shocked by her lack of concern for Del's death and do not anticipate her sudden departure.

Another symptom of Dissociative Fugue includes confusion with regard to one's personal identity and may include the acquisition of a new identity whether it be partial or complete assumption (APA, 2000). Betty showcases an assumption of a partial, new identity which is a combination of her old Betty Sizemore self and new Nurse Betty self from *A Reason to Love*. Betty knows she was married to Del and from Kansas, but has created memories that did not truly occur in her past such as her fictional engagement to Dr. Ravell and prior divorce from Del.

After Betty arrives in Los Angeles, her first mission is to find the hospital where Dr. Ravell works. She speaks to an employee of a local hospital about how she can find Dr. Ravell and is astonished that this woman knows nothing about her famous ex-fiancé surgeon. The employee assumes that Betty is looking for a job and tells her the hospital has noth-

ing available. Acting as Nurse Betty she consoles a patient as she is walking through the hospital while wearing clothing very similar to the nurse costumes in *A Reason to Love.* When exiting the hospital Betty stumbles upon a gang shooting that is interfering with an ambulance patient receiving care. She is very calm even with a gun pointed directly at her and gets into the ambulance where she saves the young man's life by performing a procedure she watched on the soap opera. Betty does not hesitate to care for the dying man and obviously whole-heartedly believes she is a trained nurse. Her heroic efforts land her a nursing position in the pharmacy of the hospital and a place to stay, which further encourages her focus on finding Dr. Ravell.

Consistent with *DSM* requirements Betty shows no signs of Dissociative Identity Disorder prior to the onset of Dissociative Fugue (APA, 2000). She also has no prior medical condition that can be observed in the film. The film's beginning focuses on an average day in her life, and she appears perfectly healthy. When the two hit men disguise themselves as detectives in search of Betty and the Buick LeSabre that happens to have the drugs they are after in the trunk, they interview Betty's grandparents. Her grandmother states that she never understood why Betty put up with all of Del's abusive behavior, but indicates that Betty was a very pleasant and normal person. The disorder is not caused by the physiological effects of a substance, drug, or medication, because the viewer observers her dissociation begin while she simultaneously watches *A Reason to Love* and her husband's murder.

The last criteria of Dissociative Fugue is showcased by Betty's notable impairment in social and occupational functioning caused by her new identity. She abandons the life she built in Kansas because of her disorder, leaving her friends, family, and co-workers worried. She leaves no trace of where she is traveling to and did not give the diner notice of an extended absence from work. She also leaves without regard to the investigation into her husband's death and therefore becomes a suspect in his murder. The sheriff and a local town reporter follow Betty to Los Angeles based on the reporter's instinct that she is playing the role of Nurse Betty. Also, the hit men following her slowly unravel her whereabouts and intend to finish their job by finding the drugs hidden in the LeSabre and murdering Betty. Her dissociation has obviously caused impairment to her social and occupational functioning.

Betty's symptoms clearly call for a diagnosis of Dissociative Fugue. The psychologist who questions her after Del's murder reports seeing symptoms of shock and signs of a post-traumatic reaction with possible dissociative symptoms obviously caused by the trauma of witnessing Del's death (Kendall-Tackett & Kelst, 2009). Travel and memory dissociation are the main distinguishing factors of Dissociative Fugue. Betty literally travels half way across the United States with no memory of Del's death, and a newly constructed identity. Though this disorder only occurs in about 0.2% of the population, it is one of the most fascinating stress disorders and creates an interesting basis for a comedic

film (Comer, 2007). The rarity of Dissociative Fugue makes *Nurse Betty* an educational case study for students and professionals to see the disorder, since they are unlikely to encounter a true Dissociative Fugue in their training or practice.

References

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text revision). Washington, DC: Author.

Badura, A. S., Reiter, R. C., Altmaier, E. M., Rhomberg, A., & Elas, D., (1997). Dissociation, somatization, substance abuse, and coping in with chronic pelvic pain. *The American College of Obstetricians and Gynecologists, 90,* 405-410.

Calssen, C., Koopman, C., & Spiegel, D. (1993). Trauma and dissociation. *Bulletin of the Menninger Clinic, 57,* 178-194

Comer, R. J. (2007). *Abnormal Psychology* (6th ed.). New York, NY: Worth Publishers

Golin, S., & Mutrux, G. (Producers), & LaBute, N. (Director). (2000). *Nurse Betty* [Motion picture]. United States: USA Films

Kendall-Tackett, K., & Kelst, B. (2009). Causal mechanisms and multidirectional pathways between trauma, dissociation, and health [Abstract]. *Journal of Trauma & Dissociation, 10,* 129-134.

Dissociative Identity Disorder in the Movie *Identity*

Jami Sitzmann

Creighton University

Dissociative Identity Disorder (DID) is a rather unusual disorder which has a tendency to be misrepresented in the public eye. The movie *Identity* (Konrad & Mangold, 2003) gives a clear and vivid depiction of an individual with DID. The movie begins in a terrible rain storm in a desert in Nevada. Ten strangers get stranded in a lonely motel, with nothing to do but wait out the storm. However, as the night goes on, the strangers begin to die one by one. As the survivors are frantically trying to find the killer, they realize that it may not be a coincidence that they are all stranded at this specific motel together.

The movie takes a spin as the viewers realize that the ten strangers are not different *people*, but they are ten different *personalities* residing in one man. In an attempt to fuse all of the sub-personalities, the host's doctor is slowly "killing" them one by one. The host is a man named Malcolm who is a convicted murderer on death row. However, his lawyer and doctor must manage to convince the judge that he is truly ill with DID before they are able to execute him.

Four main diagnostic criteria in DSM-IV define DID (American Psychiatric Association [APA], 2000), all of which Malcolm meets in this movie. The first main criterion is "the presence of two or more distinct identities or personality states (each with its own relatively enduring patterns of perceiving, relating to, and thinking about the environment and self)" (p. 529). Ten different personalities are clearly depicted at the motel. Their characteristics range from a perfectionist father who is at the motel with his soft spoken wife and timid son Timmy, to a prostitute in her mid-twenties named Paris. A newlywed couple in their early twenties, Ginny and Lu, are also at the motel. The new bride is a young, paranoid girl with her new husband, who is depicted as a rude and arrogant man. Larry is the office manager who brings a nervous tone to the scene. Officer Rhodes is a power-hungry "police officer" with his rude convict. Though, it is later revealed that Officer Rhodes is not a police officer, but was also a convict who was being transported to another prison. However, a legitimate police officer on the scene (though retired from the line of duty) named Ed, works as a limo driver for a high-maintenance actress named Carolyn Susan.

The characters are representative of ten distinctly different personalities, with very different backgrounds and characteristics. A journal is presented by Malcolm's doctor during a scene in the movie. The journal portrays these drastic differences with altered writing styles, tones, and points of views portrayed throughout. One page reveals writings and drawings obviously done by a child, which immediately change to entries written by an educated middle-aged man on the very next page. These drastic alterations give clear, physical evidence to the differences present in Malcolm's various sub-personalities.

The second main criterion for this disorder is "at least two of the identities or personality states recurrently take control of the person's behavior" (APA, 2000, p. 529). This criterion is very well portrayed from the beginning of the movie. Ed, for example, is a very strong, dominant personality from the initial scene. He is a take-charge type of man who takes on a role of the protector as soon as they reach the motel. He continues to give orders in hopes that everyone will remain safe until the "killer" is found. However, toward the end of the movie Ed is confronted by the therapist who is attempting to fuse Malcolm's sub-personalities. As the doctor attempts to explain his situation, Ed is unable to fathom this information. He believes the men are lying to him, and he becomes very distraught and disoriented. Until that defining moment, Ed was completely unaware of the fact that he was simply one of many personalities residing in one man's body.

Ed was not the only strong personality. Paris, the young prostitute, also takes control of Malcolm's body during a few scenes in the movie. One of the most clearly depicted is during a dramatic scene toward the end of the movie: As Ed becomes aware of his role in trying to catch the "killer," he gets in trouble and is shot in the chest by another personality. He is shown lying on the ground in the rain, with Paris leaning over him attempting to keep him alive. The two converse for a moment before he slips away. This scene is shown from the perspective of the host, Malcolm, with the other men around the room staring blankly at him, completely bewildered. Malcolm is shown looking from side to side, changing his voice and his mannerisms as he shifts from Paris to Ed. He clearly embodies the entire role and characteristics of each individual as he changes from personality to personality.

This shifting from one personality to the next occurs much more frequently as Malcolm's doctor is attempting to fuse the sub-personalities. The shifting is generally portrayed as something as simple as a flinch or a subtle movement, and it can occur in a fraction of a second. Malcolm continues to transition from sub-personality to sub-personality throughout the entire movie.

At the end of the movie, the personality quickly shifts from Paris to the quiet, almost forgotten young boy, Timmy. The viewer is exposed to the truth, at this point in the film, that Timmy is the true killer. His personality was in charge of Malcolm's body during the six murders for which he was convicted. This explains why Malcolm was unaware of the murders because he was not mentally and emotionally present during these events.

Though DID is very specifically defined in the DSM-IV-TR (APA, 2000), a great deal of controversy still surrounds this disorder (Comer, 2006). Many studies have been performed in the recent past to examine its legitimacy, and to try to find explanations for some of its extraordinary characteristics (Kong, Allen, & Glisky, 2008). One such characteristic that has gained much attention in the past few years is the idea of inter-identity amnesia (IIA), which suggests that separate sub-personalities in persons with DID share neither explicit nor implicit memories between each other (Kong et al., 2008). The idea of IIA could explain why Malcolm was not only unaware of the murders while he was committing the act, but was also unaware of them afterward. The separate sub-personalities residing within Malcolm have very different memories that do not correlate to one another.

This lack of correlation and awareness of memories ties into the next main DSM-IV criterion which is an "inability to recall important personal information that is too extensive to be explained by ordinary forgetfulness" (p. 529). As Malcolm's doctor is trying to prove his disorder to the judge, he asks Malcolm a wide range of questions. At one point he is asked about the murders of which he has been convicted, and Malcolm is unable to recall these events. Instead, he responds by listing the capitals of multiple states. Because he was not psychologically present during the murders, he is unable to recall the gruesome events, and he therefore simply ignores the questions put forth by the doctor.

An inability to recall important personal information is also very closely tied to the different sub-personalities. Each one not only has a different set of characteristics, but they also have their own memories and pasts. The sub-personalities are convinced that they have completely different lives/histories. This idea is slowly made evident as the

strangers spend more time together in the motel. They not only claim to have different stories, but they are all from different states, have different families, and completely different lifestyles. However, the sub-personalities are completely unaware of the life story of their host, Malcolm.

The fourth and final main criterion for a DSM-IV diagnosis of DID (APA, 2000) is that "the disturbance is not due to the direct physiological effects of a substance (e.g., blackouts or chaotic behavior during Alcohol Intoxication) or a general medical condition (e.g., complex partial seizures)" (p. 529). Malcolm clearly portrays this as he is brought directly from his prison cell to the room containing the judge and lawyers. He is unable to have alcohol or any other substances while in prison. He is then strapped to a wheel chair during his transportation, which makes it essentially impossible for him to consume any substances during the transport process. Malcolm clearly has no history or report of any medical conditions that could have produced these changes in his demeanor. He presumably has multiple personalities residing within him that are intermittently taking control of his body.

The four main criteria are the only factors that need to be present in order to have a clear and accurate diagnosis of DID. Malcolm seemingly meets all of these conditions, and in the end, he is allowed off of death-row due to this psychological disorder. DID is sometimes portrayed as rather extravagant in the media, though it is not always such an extravagant disorder. Individuals diagnosed with this disorder have varying experiences and symptoms, and are many times able to go about their day-to-day lives without interference. Though it is sometimes hard to grasp the unusual and indiscriminate symptoms associated with DID, I feel *Identity* (Konrad & Mangold, 2003) was able to accomplish this convincingly.

References

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text revision). Washington, DC: Author.

Comer, R. J. (2006). *Abnormal Psychology (6th ed.).* NY: Worth.

Kong, L. L., Allen, J. J. B., & Glisky, E. L. (2008). Interidentity memory transfer in dissociative identity disorder. *Journal of Abnormal Psychology, 117*, 686-692.

Konrad, C. (Producer), & Mangold, J. (Director). (2003) *Identity* [Motion Picture]. United States: Columbia Pictures.

Disfigured: A Portrayal of Eating Disorders

Emily Kubalik

University of Nebraska at Kearney

Darcy, portrayed by Staci Lawrence, is recovering from anorexia nervosa restricting type in the independent film *Disfigured* (Higgins & Gers, 2007), which chronicles the struggles of two women with different weight and body image issues. In the film, Darcy strikes up an unlikely friendship with Lydia, played by Deirdra Edwards, who is obese and likely struggles with a binge-eating disorder. The women support each other in both healthy and unhealthy ways as they deal with life's problems and their disorders. In this article, I analyze the film's representation of anorexia nervosa and binge-eating disorder by examining pertinent psychological theoretical perspectives including sociocultural, cognitive behavioral, and psychodynamic theories.

Darcy first meets Lydia at a meeting of a "Fat Awareness Group." Darcy tries to join the group in a desperate attempt to accept herself. The group rejects her because they do not believe that a thin woman can share their struggle with weight. The group's focus is to accept their bodies, reject society's portrayal of "fat people," and resist the unrealistic ideal body type for women portrayed in the media—referred to as a "six-foot, twelve year old" (Higgins & Gers, 2007).

From a sociocultural perspective, both body issues have similar etiology. The media portrays an image of female beauty that is unattainable for most women; over the past several decades this ideal has become increasingly thinner (Barlow & Durand, 2005). The internalization of idealized conceptions of feminine beauty, thinness, and the modern emphasis on dieting contribute to the dysfunctional relationships with food evident in anorexia, binge-eating, and body dissatisfaction.

In one scene, Darcy is asked what her "secret" is for staying so thin, to which she replies dryly, "I starve myself." Throughout the film, Darcy is repeatedly complimented on her weight even though she is still drastically underweight by medical standards. She obsessively calculates and records her caloric intake and expenditure, carefully plans her meals, and intensely exercises everyday. At night, she stands before a mirror, gazes at her undernourished body, and pinches at supposed fat deposits, dissatisfied with what she sees.

From a cognitive behavioral perspective, many of Darcy's thought distortions regarding her body have been reinforced by positive reactions from others to her weight loss. In addition, anorexics tend to draw their sense of self-worth and success from their ability to lose weight. In the film, Darcy tells Lydia that when she feels insulted or hurt she calculates how many more calories she can cut or how many more minutes she can add to her workout. By exerting her will power over food, Darcy feels a sense of control and self-worth.

After an emotional breakup with her boyfriend, Lydia finds herself drawn to her old coping mechanism of dulling painful emotions with a food binge. The film portrays Lydia's binge eating as beginning in high school for unspecified reasons when she binged with a high school friend. She recalls these early binges nostalgically. Somehow food binging became her coping mechanism for dealing with life stressors. Approximately 33% of binge eaters do so to relieve emotions or moods (Barlow & Durand, 2005).

From a behavioral perspective, the movie portrays the influence of entrenched behaviors in Lydia's binge eating. Behaviorists would argue that the temporary relief achieved from binging has conditioned Lydia to use food for comfort, creating a trigger for her binges. Although she resists, Lydia, like many bulimic individuals, eventually binges.

In *Disfigured*, Darcy had been in clinics and therapy on and off since she was an adolescent. She recently stopped seeing her therapist and expresses a sense of hopelessness toward controlling her eating disorder. Lydia also tried a myriad of diet programs and failed to reach her goals over the years. Darcy and Lydia depict women who continuously struggle with significant symptoms of eating disorders.

Both women developed an attitude similar to Martin Seligman's concept of learned helplessness (Barlow & Durand, 2005). Their past efforts to overcome their disorders failed so many times they feel helpless to affect change. Darcy believes that she will never be able to eat regularly, and Lydia feels that she will be "fat" forever.

Darcy's past therapy followed a psychodynamic model. She tells Lydia that she examined her relationships with her parents in therapy and how those relationships contribute to her disorder. Darcy says that she discovered in therapy that her mother resented her as a sexual threat because her father, who had many affairs, might desire Darcy once she went through puberty. The emphasis on sexual development and parental relationships indicate psychodynamic talk therapy was likely used. However, there is not sufficient evidence given in the film about her past treatment to determine this conclusively. Recent research indicates that cognitive behavioral therapy may be the most effective treatment for eating disorders, and including family in the treatment process is important. However, the long-term prognosis for anorexia is poor (Barlow & Durand, 2005).

Disfigured gives an in-depth and overall accurate portrayal of women struggling with anorexia and a possible binge-eating disorder. True to the reality that eating disorders are a lifelong struggle, the film ends without a neat, happy ending, but it does end with hope. Darcy decides to return to treatment on her own, without family or outside pressure. This is an important step because motivation is an important part of the therapeutic process, and her past therapy was motivated by trying to appease her parents. She and Lydia also change the focus of the "Fat Awareness Group" to be more inclusive, allowing women of all body types and sizes to share their stories and work towards healthy acceptance and celebration of their bodies. The film ends as it began, focusing

on the sociocultural influences on women's weight issues, which is especially important considering that anorexia is one of the most culturally specific disorders that has been identified (Barlow & Durand, 2005). *Disfigured* is recommended for both its portrayal of the intimate struggles of women with eating disorders and its strong social commentary.

References

Barlow, D. H., & Durand, V. M. (2005). *Abnormal psychology: An integrative approach.* Belmont, CA: Thomas Wadsworth.

Higgins, D. W. (Producer), & Gers, G. (Director). (2007). *Disfigured* [Motion Picture]. United States: Cinema Libre Studio.

Flying Blind: Diagnosing Obsessive-Compulsive Disorder in *The Aviator*

Matthew E Fennessy

Creighton University

"Come in with the milk. Come in with the milk. Come in with the milk. Come in with the milk. Come in with the milk..."

-Howard Hughes, *The Aviator* (Evans, King, Mann, & Scorsese, 2004)

In director Martin Scorsese's epic biographical film, *The Aviator*, the protagonist demonstrates several unusual behaviors. Billionaire filmmaker Howard Hughes rigidly drinks bottled milk at parties, at business meetings, and on airplanes. While shooting a movie production, Howard hires a meteorologist to find some clouds; specifically, ones that look like giant breasts full of milk. When production for another film is halted by the censorship board for an unwarranted display of an actress's breasts, Howard goes to great lengths legitimizing his personal titillations by using the same hired meteorologist to improvise a mammary exhibition. In due course, Howard secludes himself in a private room and methodically urinates into empty milk bottles

Such a bizarre description of a person's infatuation with milk and mamma might make Howard sound like the prototypical patient of Freud's. Despite these symptoms, Mr. Hughes does not suffer from an oral fixation. Rather, he suffers from a very real and debilitating anxiety disorder, Obsessive-Compulsive Disorder. In the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2000), a diagnosis of OCD is warranted when five specific criteria are met by the individual. This paper argues that in the film, *The Aviator*, Leonardo DiCaprio's portrays the character Howard Hughes in a way that all five of these diagnostic criteria, and also explores the possible roles his

compulsions might play in relation to his obsessions.

The Aviator begins by introducing a boy in early childhood being bathed by his mother while she apparently tutors him on the dangers of disease. A transition is then made from the young and seemingly innocent boy to the world of the Hollywood icon, Howard Hughes. Spanning the 1920s to late 1940s, Scorsese's film singles out specific elements of Howard's life, from his career as a filmmaker and engineer, to his intimate relationship with Kate Hepburn, to his business interest with a leading airline. The main antagonists in the film are Howard's business competitors: the commercial airline powerhouse, Pan American Airlines, and its powerful supporter, Senator Brewster. Yet it can be argued that the real conflict that takes place in the film is psychological: Howard's escalating neuroticism.

The film subtly alternates between the private and public sides of Howard. His obsessions and compulsive behaviors intersect with both aspects of his life throughout. In spite of this, Obsessive-Compulsive Disorder is never mentioned in the film. In fact, that Howard has a disorder of any kind is never mentioned, though several characters display suspicion of his atypical behavior. As such, *The Aviator* is more a biography of Howard Hughes than it is a film about OCD. Still, the characteristics of OCD are displayed by Howard to such an extent that they can be understood as meeting the diagnostic criteria.

A critical part to understanding Obsessive-Compulsive Disorder is the ability to distinguish obsessions and compulsions from one another. Although they are often functionally related to one another in sufferers, the DSM-IV-TR (APA, 2000) defines both in criterion A as distinguishable characteristics. Obsessions are defined as recurrent and persistent thoughts, impulses or images that are experienced as intrusive and inappropriate at some point during the disorder, causing significant anxiety or distress. They cannot be excessive worries about real-life problems, and the person attempts to suppress, ignore, or neutralize them with another thought or action. Furthermore, the person recognizes that the obsessions are produced by his or her own mind, and not imposed from any external source.

The two most frequently recurring obsessions that Howard displays throughout the film are thoughts of contamination and thoughts of incompleteness. Both types of obsessions are common in OCD sufferers. In fact, fear of contamination is the most common experience in OCD, with an estimated 50% of sufferers having this type of obsession (Rasmussen & Eisen, 1992). A difficulty in identifying Howard's obsessions is that, unlike most compulsions, they are not overt behaviors (Hersen & Thomas, 2006). Verbal cues were thus required for this type of identification in Howard. One of the first indicators that Howard has obsessive thoughts of contamination is when he takes his girlfriend, Kate Hepburn, on a romantic plane ride over Hollywood. When Kate asks Howard why he wrapped the steering wheel in cellophane, Howard tells her it is to protect them from the "crap" that people carry on their hands. Clearly, this is an unrealistic

phobia. When paired with other verbal cues of the fear of contamination shown in the film it can be seen as a recurrent and persistent thought. For example, Howard asks his latter girlfriend, Ava Gardner, if the sink she tells him to wash up in is clean.

Not only are Howard's obsessions irrational, but they are highly distressful, which is implied by his avoidance of situations that would place him in imagined danger. This behavior also meets criterion C in the DSM-IV (APA, 2000), which states that the obsessions and compulsions cause marked distress and interfere with the person's daily functioning. In the beginning of the film, Howard cancels a business trip to Houston and rationalizes his decision with a ludicrous exaggeration of a local cholera epidemic. When the F.B.I. searches his house later in the film, Howard calls his consultant in a panic because they are touching all of his belongings. Clearly, Howard's distress is not related to the more obvious dangers of losing his career, but to his own concerns about contamination and disorder. In short, his obsessions are not related to real life problems.

Howard attempts to suppress his intrusive thoughts of contamination throughout the film. While having dinner with Senator Brewster, Howard eats fish and drinks from a dirty glass; things he would normally avoid. This atypical behavior ultimately leads to great distress when he leaves the room short of breath and collapses. In perhaps a more memorable scene in the film, a pea is stolen from Howard's pristinely arranged dinner plate at a party. Witnessing this, Howard fixes his eyes on the plate, shutting off communication with his friends. Howard then attempts to respond to a friend's question. Failing to redirect his attention to the conversation, he excuses himself from the table. The delay before his excusing himself, as well as his attempt to follow the dinner conversation, are evidence that Howard attempts to suppress his intrusive thoughts.

One scene shows evidence for the last condition in criterion A. Howard and Kate Hepburn have a personal exchange at his mansion, where he tells her that he sometimes has thoughts he believes are not real. He calls them crazy and says he sometimes fears he is losing his mind. "Sometimes I truly fear that I…am losing my mind." Says Howard, "And if I did it…it would be like flying blind" (Evans et al., 2004). This scene is particularly important because it shows that Howard has come to the realization that some of his thoughts are not products of environmental factors but his own mind.

Howard's obsessions are functionally related to the overt compulsions displayed by him. This connection fulfills criterion D, that the obsessions and compulsions cannot be restricted to any other present disorder (APA, 2000). A characteristic role that compulsions play in OCD is to provide relief from the distress that is brought on by the obsessive thoughts (Antony, Purdon, & Summerfeldt, 2007). However, the content of Howard's obsessions is rarely made explicit throughout the film. Thus, to decipher what it was that could have been causing the overt act, it was necessary to first identify the various compulsive acts Howard performed. A study

done by Olutunji and Armstrong (2009) suggests that some people high in contamination fears have chronic disease-avoidant goals.

People with OCD tend to avoid situations that might expose them to contagions. In *The Aviator*, Howard avoids touching a disabled man in a restroom by not handing him a towel. In another bathroom scene, Howard avoids touching a door handle and instead waits for someone to open the door for him. Importantly, the avoidance behavior observed in both of these scenes takes place immediately after Howard washes his hands excessively. Such a pattern of avoidance is highly suggestive that the disturbance which sets off his compulsive hand washing is a fear of contamination.

Compulsions are defined as mental acts (e.g., repeating words, counting) or repetitive behaviors (e.g., hand washing, ordering) that the person feels compelled to do in response to an obsession, or in order to follow certain rules rigidly (APA, 2000). Furthermore, the compulsions are aimed at reducing or preventing the disturbance, and are either clearly excessive or unrealistically connected to the disturbance.

Whereas Howard's avoidance behavior is a way for him to deal with his contamination fears, his intrusive thoughts of incompleteness are dealt with differently. Pietrefesa and Coles (2009) suggest that although avoidance is related to the desire to prevent harm, incompleteness is related to the discomfort of not performing a job perfectly. Howard's sense of incompleteness results in compulsive behaviors such as checking. He rigidly checks the bolts of a plane in a hangar, and spends an unreasonably long time deciding on a type of wheel for a plane.

In addition, Howard makes unrealistic demands aimed at reducing the distress caused by his intrusive thoughts. An example is when Howard orders ten chocolate chip cookies with medium-sizes chips not too close to the outside. The order is not rational, and does not resolve his distressing thoughts of imperfection. His actions are sometimes excessive as well, such as when he burns all of his clothes and then calls his consultant late at night to request a specific brand of suits.

The DSM-IV (APA, 2000) defines obsessions and compulsions as being recognized by the person as excessive or unreasonable at some point during the disorder's course (criterion B). Howard often displays distress in reaction to his compulsions. The embarrassment or discomfort that follows gives a significant indication that Howard recognizes his inappropriate behavior. When he engages in mental acts, for example, and begins repeating "Show me all the blueprints" to a staff member, he removes himself from the area and covers his mouth dramatically.

Finally, criterion E states that the disturbance cannot be caused by any physiological effects of a substance or medical condition. No substance abuse or medical condition is shown throughout the film.

Howard Hughes adequately fulfills the DSM-IV (APA, 2000) requirements for a diagnosis. What distinguishes *The Aviator* from other comparable films about OCD is that despite the suffering in Howard as he struggles with his obsessions, he never seeks professional help and never learns how to manage his disorder properly. With compulsions such as rigidly checking for incompleteness, hand washing and performing mental acts, Howard only does more harm to himself than good. Perhaps if he had sought the aid of a clinician, he would have had a less chaotic life. *The Aviator* provides an illustration of the emotional suffering that comes with Obsessive-Compulsive Disorder, especially in those trying to cope without the support of others.

References

American Psychiatric Association. (2000).*Diagnostic and Statistical Manual of Mental Disorders.* (4th ed., text revision). Washington, DC: Author.

Antony, M. M., Purdon, C., & Summerfeldt, L. J. (2007). *Psychological treatment of obsessive-compulsive disorder: Fundamentals and beyond.* American Psychological Association: Washington, DC.

Evans, C., King, G., & Mann, M. (Producers), & Scorsese, M. (Director). (2004). *The Aviator* [Motion picture]. United States: Miramax Films.

Hersen, M., & Thomas, J.C. (2006). *Comprehensive handbook of personality and psychopathology: Adult psychopathology.* New York: Wiley.

Olatunji, B. O., & Armstrong, T. (2009). Contamination fear and effects of disgust on distress in a public restroom. *Emotion, 9,* 592-597.

Pietrefesa, A. S., & Coles, M. E. (2009). Moving beyond an exclusive focus on avoidance in obsessive-compulsive disorder: Behavioral validation for the separability of harm avoidance and incompleteness. *Behavior Therapy, 40,* 251-259.

Rasmussen, S. A., & Eisen, J. L. (1992). The epidemiology and clinical features of obsessive-compulsive disorder. *Psychiatric Clinics of North America, 15,* 743-758.

Conducting Psychological Analysis—Current Events

The Perception of Leadership Before and After the 2008 Presidential Election

Elora Voyles

Southern Illinois University

In the midst of an overseas war, economic downturn, and energy conservation concerns, many Americans viewed the

2008 presidential election as a possible turning point in America's future. Americans formed their opinions of candidates in part based on perceptions of the candidates' leadership qualities. Mills (2005) suggested effective leadership has been instrumental in leading our country through tough times, building successful companies, and unifying the United States. With the weight of the election in mind, Americans chose a candidate, in part, on how well the candidates' traits fit their perception of a leader. The present study investigated perceptual comparisons of leaders, specifically George W. Bush compared to Barack Obama, at two different times during the course of the 2008 election.

Thomas Carlyle marked the beginning of academic research in leadership by publishing his Trait Theory in 1841. Since then, numerous organizational leadership theories have been developed and studied. Fiedler (1967) proposed a contingency model categorized by two types of leadership: relationship verses task-oriented. Additionally, Vroom and Jago (1998) suggested that no single style of leadership is effective for all people in all situations. Recently, research on leadership has changed focus from the leader's characteristics to the followers' perceptions and responses (Raed & Gardner, 1999).

Recent leadership theories suggest that leadership is a perceptual phenomenon. Raed & Gardner (1999) suggested that the success of a leader is dependent on followers' perception of the leader's charisma and effectiveness. Gardner and Avolio (1998) stated that followers help construct their leader's public image. Impressions of leadership are based on implicit and explicit information about the leader that the follower uses when thinking about and describing their leader.

Leadership perceptions are also influenced by external factors. McIlwain (2007) examined perceptions of leadership traits during Barack Obama's 2008 primary campaign. McIlwain stated that perceptions of leadership traits influenced by the media had a powerful effect on how individuals defined leadership. The impact of the current events in the media on perceptions of successful leadership was documented by Steeper (1983) based on the 1976 presidential debate. President Ford mis-stated that Eastern Europe was not controlled by the Soviet Union. Immediately after the debate this comment did not have a negative impact on perceptions of Ford, but during the weeks following the debate the media coverage focused on Ford's mistake. As the debate was re-analyzed by media sources, Ford was perceived as the debate's loser. These externally driven, subjective perceptions of leaders under media scrutiny may directly influence perceptions of traits associated with successful leadership.

One of the often unmentioned assumptions within leadership theories is the stability of follower perceptions of positive leadership traits. Few studies on leadership account for the impact of current events or the cultural context of leadership. This study attempts to examine possible contextual shifts in what traits are associated with leadership. Changes in participants' perceptions of valued leadership characteristics are examined through the course of the 2008 presidential election. I hypothesized that perceived leadership traits are dynamic and fluctuate based on the participants' free recall of successful leaders.

Method

Data was collected during two separate semesters of a 300 level organizational behavior classes at a Mid-Western university. The classes were comprised of mostly psychology and business majors. Data was collected in July 2008 near the end of George W. Bush's presidency *(N = ~60)* and in November 2008 shortly after the election of Barak Obama as the President of the United States *(N = ~140)*. During each data collection students worked in teams of three to five students. Each group was asked to list the first three leaders that came to mind, after which they were asked to list three traits they thought all three leaders listed shared.

Results

Student's open-ended qualitative data was analyzed using counts on each leader to identify the leader most often identified and then the top three traits associated with leadership at that time. The first data collection point occurred when George W. Bush and the war in Iraq were central stories in the media (July 1, 2008). George W. Bush was most often identified as an example of a leader (by 38% of the respondents). The most identified leadership trait was aggression (63%), followed by charisma (21%), and then intelligence (8%).

The second data collection occurred a few days after the United States presidential election with a strong focus Barack Obama and the economy in the news (November 10, 2008). Barack Obama (47%) dominated the examples of a leader with the strongest leadership traits listed as communication (26%), followed by aggression (25%), and intelligence (20%). See Figure 1 for a breakdown of leaders listed at both times. There was a significant change from July to November in perceptions of shared traits of leaders, $\chi2$ (1) = 13.18, p = .001. Aggressive traits were seen as most important in July but were supplanted by communication in November.
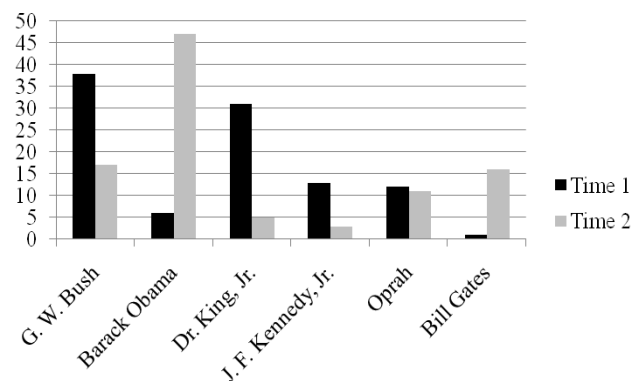

Figure 1. *Top six listed leaders at time one and time 2*

The results were compared with media statistics from July and November 2008. During July, 130 stories were published on George W. Bush; however, during November, Bush reached his lowest numbers with only 48 news stories (Project for Excellence in Journalism, 2008). In November, 62.4% of the political media coverage was focused on Obama (Project for Excellence in Journalism, 2008). Furthermore, during November there were a total of 583 news stories (75.6% of the campaign coverage) focusing on Barack Obama (Project for Excellence in Journalism, 2008).

Discussion

Organizational leadership research traditionally focuses on leadership style interacting with organizational climate. This study indicates the possible transitory nature of perceptions of who are successful leaders and thus also the positive leadership traits associated with those leaders. When George W. Bush was the president, he was reported more often by participants as an example of a leader. Concurrently with George W. Bush being most identified with leadership, the most often reported leadership trait was aggression. When data was collected again just after the election, Barack Obama was most often identified as a leader and the most reported trait shifted to communication. Current social, cultural, and political events can all have an influence on perceptions of leaders and leadership traits. Research has shown that the success of leadership is mediated by situational constraints and the type of task (Vroom & Jago, 1998). This study suggests that current events should also be considered when examining leadership in organizations.

The limitations of this research lie in its non-experimental nature. Additionally, the data was collected using a group process, which limits generalization to group level perceptions. Further research should focus on the specific nature of media representations of leaders and leadership and how they affect leadership evaluation in the workplace. The results of this study suggest that current events lead to fluctuations in whom people think of as examples of leaders, and that who people think of as leaders is related to what traits are associated with leadership.

References

Fiedler, F. E. (1967). *A theory of leadership effectiveness*. McGraw-Hill: Harper and Row.

Gardner, W. L., & Avolio. B. J. (1998). The charismatic relationship: A dramaturgical perspective. *Academy of Management Review, 23*, 32-58.

McIlwain, C. (2007). Perceptions of leadership and the challenge of Obama's blackness. *Journal of Black Studies, 38*, 64-74.

Mills, D. Q. (2005). *Leadership: How to lead, how to live*. Waltham, MA: Mind Edge Press.

Project for Excellence in Journalism (2008). Winning the Media Campaign. *From Pew's Research Center's Project for Excellence in Journalism*. Retrieved from: http://www.journalism. org/node/13307.

Raed, A., Gardner, W. (1999). Perceptions of leader charisma and effectiveness: The effects of vision content, delivery, and Organizational Performance. *The Leadership Quarterly, 10*, 345-373.

Steeper, F. T. (1983). Public response to Gerald Ford's statements on Eastern Europe in the second debate. In A. Ranney (Ed.), *Channels of power*. New York: Basic Books.

Vroom, V. H., & Jago, A. G. (1998). Situation effects and levels of analysis in the study of leader participation. In F. Dansereau & F. J. Yammarino (Eds.), *Leadership: The multiple level approaches* (pp. 145-159). London: JAI.

Psychologically Speaking

A Mentor to Students and Teachers Alike: An Interview with Stephen F. Davis

Abbie Harris, Brittany Schmidt &
Richard L. Miller

University of Nebraska at Kearney

Stephen F. Davis is Emeritus Professor of Psychology at Emporia State University. He served as the 2002-2003 Knapp Distinguished Professor of Arts and Sciences at the University of San Diego. Currently, he is Distinguished Guest Professor at Morningside College (Sioux City, IA) and Visiting Distinguished Professor of Psychology at Texas Wesleyan University. Steve received his Ph.D. in General Experimental Psychology from Texas Christian University and began his teaching career at King College, a small, Presbyterian college located in Bristol, Tennessee. His career moved from that of laboratory researcher to a fascination with the teaching of psychology and an involvement with undergraduate students and education. His commitment to and passion for the teaching of psychology is illustrated by his service in various offices within the American Psychological Association and his work with Psi Chi, the National Honor Society in Psychology. Since 1966, he has published over 300 articles, 33 textbooks, and presented over 900 professional papers; the vast majority of these publications and presentations include student coauthors. He has served as President of the Society for the Teaching of Psychology (APA Division 2), Southern Society for Philosophy and Psychology, Southwestern Psychological Association, and Psi Chi. In addition, he received the first Psi Chi Florence L. Denmark Faculty Advisor Award. He is a Fellow of APA Divisions 1 (General), 2 (Society for the Teaching of Psychology), 3 (Experimental), and 6 (Behavioral Neuroscience and Comparative Psychology), and a recipient of the American Psychological Foundation's Distinguished Teaching in Psychology award.

Miller: As one of the original editors of this journal, through your creation of the Great Plains Students' Psychology Convention, and in your role as editor of the *Psi Chi Journal of Undergraduate Research*, you have touched the lives of students throughout the region and the country. In recognition of that, it is a pleasure to have this opportunity to talk with you. The two students who will be conducting this interview are both undergraduates from the University of Nebraska at Kearney. Abigail Harris is a senior, majoring in psychology with a minor in biology. After graduation, she intends to pursue a doctorate in cross-cultural psychology. Brittany Schmidt is a junior, majoring in psychology with a minor in special education. She intends to pursue a graduate degree in school psychology.

Schmidt: In high school you were interested in building and racing cars. What made you decide to go onto college?

Davis: There was never any doubt that I was going to college. I just continued to build race cars during my first two years in college. I paid my tuition drag racing. We didn't race on the street, like Fast and Furious. We always raced on the strip on Friday and Saturday nights and then Sunday afternoons.

Harris: Did a lot of your peers go to college? Was that expected of a lot them?

Davis: Oh yes. I grew up in north Dallas and I would say the majority of the folks I went to high school with went to college.

Harris: Did you start out as a psychology major in college? Did you know that's what you were going to do?

Davis: Yes, although I didn't know what it was

Harris: So why did you pick psychology?

Davis: I don't know. I really don't. There's no magic epiphany. No opening of the clouds. No thunderbolts, nothing. I just sort of assumed I would be a psychology major. And I really didn't know what psychology was or what being a psychology major was at least for the first two years I was at SMU.

Harris: In some of your previous interviews you talked about your "responsibilities" to your fraternity being part of the reason for your "near-expulsion' from SMU after your first two years. What were some of those responsibilities?

Davis: I assume you've seen the movie "Animal House"? And we were not the goody-goody fraternity. We

Schmidt: Post-potential expulsion you greatly improved your academic career. Why did this change occur?

Davis: That's one thing I can put my finger on and say exactly what happened. My parents decided it was time for me to grow up, so they shipped me off to Wisconsin. I'm not sure they had any clue what I was going to do in Wisconsin other than my aunt lived there and maybe she'd be able to whip me into shape. She found me a job at a summer camp run by George Williams College, which was the YMCA college in Chicago. And this summer resort camp was staffed completely by college students – this was a good thing. I was on the dish crew. There were students there who were psychology majors and they were talking a language that I didn't even begin to understand. And they had taken the same courses that I had. They had most likely passed those courses. I most likely had either made a D or F in those classes. It was at that point that my eyes came wide open and I said "You know, you're really screwing up someone's life and it's not any of these people around you and unless you get your act together you're not going to have much of a future. Certainly not in college." I couldn't even talk to these people. You know I could fake a good "Oh, I understand," sure. But to really have a meaningful conversation with them about psychology? Never happened. So I went back at the end of the summer. That would have been after my sophomore year. That spring I had made a 2.00064, which is hard to do. The dean had told me quite confidently "If you don't make a 2.0, I will take great pleasure in kicking you out." So it was just by the skin of my teeth that I got to stay in. I went from that 2.0 to a 4.0 GPA forever; I never had anything less than an A after that. So I can really empathize with and understand the students who have had really bad records. For example, I taught one young lady as a master's student who received her undergraduate degree before I went to Emporia State; she had 2.4 cumulative GPA. How we doing? Pretty sucky. She had 780 total on the GRE. What can she do? She finished the 60 hours masters program with straight A's and was taking courses like electron microscopy. Then she completed her PhD and two post-doctoral placements. If you want it bad enough you can do it. You just have to want it bad enough. And she did. So yes, that was the turn around. That summer working in Wisconsin where I couldn't even talk to people about my chosen profession.

Harris: After your first semester of your doctoral program at TCU you were given two days to prepare to teach a statistics class. What did you do and what did you learn from this?

Davis: After I went home and changed my soiled clothes, I got the textbook for the course and every book in my own library – and that's one thing I started doing at the beginning of my junior year, I stared building my own professional library and reading it. So I got all the books that had anything to do with statistics. Then, I promised myself that I wouldn't keep the class more than 8 seconds the first day because I didn't know what I was going to say. And I went into my little study, shut the door, locked the door, and refused to come out until I had at least enough lecture notes that I wouldn't feel like throwing up on the spot. I wrote those lecture notes in very large long hand very carefully on every other line on the legal pad. Why every other line? So I could read it from anyplace in the classroom. And that literally was the way that first course went. I was tied to my lecture notes. If it was something that was going to be said it was there. So what would I do differently or how would I change that or what did I learn? I guess I learned a lot of things that I would and have done differently and I have changed a lot of things over the years. I still have lecture notes, but I only look at them every once in a while, mainly to keep me on track. My classroom has become much more interactive. If my students want to know something they ask. And they have no hesitation in putting their hands up during a class and saying "what do you mean" or "can you look at it this way" or whatever. It works, and I like it. Those are the main things that I have learned and changed. I'm sure there have been lots of other little things over the years but those are the main things. That first course was scary. It really was.

> *My classroom has become much more interactive. If my students want to know something they ask. And they have no hesitation in putting their hands up during a class and saying "what do you mean" or "can you look at it this way" or whatever. It works, and I like it.*

Schmidt: During your years teaching, what did you consider your greatest success?

Davis: There's no single greatest success. Without any question and without any hesitation, I would say my successes are my students. I've repeatedly told people – I haven't had a good, unique research idea in well over 20 years because a number of years ago I turned all of my research around from being projects that I developed to what the students brought in the office. Students bring in the ideas, and we do them – if we can. My students have been the source of many excellent projects. For example, the projects on academic dishonesty that we've conducted for well over 20 years started with a student, one of my teaching assistants, coming in and saying "I saw someone cheat today." That's where it started. It hasn't stopped yet.

Harris: A lot of professors engage in programmatic research, where what you study makes you an expert in the field. But you've just said that's not what you do. Do you regret this decision?

Davis: Absolutely not! It's been much more fun for me this way. I came out of a PhD program where you were expected to leave and go out and start doing programmatic research. And I started doing programmatic research but then the students would say "Well, if we did something with this or that" and it was still sort of the same ballpark. I started saying yes to that and then I guess it was after teaching four to five years that the whole thing just changed. So no, I have never regretted not doing programmatic research. If I had done programmatic research I would have missed out on knowing some really cool students because not all students would want to do what I was doing programmatically. This way I get to work with all sorts of different students.

Schmidt: You've talked, in past interviews, about a group of faculty that you felt supported you at the undergraduate level. During your years teaching, did you ever find yourself "channeling" those mentors while dealing with students?

Davis: Yes and no. I have never in any way, shape, or form tried to be like the three faculty who literally saved me at SMU. They were their own unique individuals. What I have tried to borrow from them are their feelings and concerns for students. They cared. Unfortunately, I don't think everybody cares. They taught me a lot, a whole lot. It can be summed up as "care about the students" -- they definitely are worth caring about.

> *It can be summed up as "care about the students" -- they definitely are worth caring about.*

Harris: You encouraged peer teaching and interactive classes, but one major problem with that is social loafing. How did you deal with this issue? Or was it ever an issue?

Davis: I never really sensed it being an issue in my classes. I think the social loafers tended to simply not come to class, just come for the tests; they were rewarded accordingly. Because I truly believe if the class is worth teaching, it should be worth the students coming to. If you think I'm doing a bad job – tell me, and I don't mean on the end of the semester evaluations. Put your hand up "Hey! We're not following this" or "What does going home and watering the tomatoes at 3:00 PM, have to do with theories of learning?" If the class isn't interesting enough to bring the students to the class sessions, then the onus of responsibility should not be on the students to be there for some artificial attendance policy. The onus should be on the teacher to make the class something that students want to come to and be a part of.

Schmidt: You have received many teaching awards. What teaching strategies do you believe set you apart from other teachers?

Davis: That's the kind of question I really don't handle well because I look at my career and say well, ok, I've had good students. The students have made me look good. Not me. I'm not sure that I have done anything, at least in my mind, that is unusual or unique or whatever. I really don't

Harris: You received the Psi Chi/Florence L. Denmark National Faculty Advisor award in 1987. What do you think makes a good advisor?

Davis: Same thing that makes a good teacher – caring about the students. If you're going to be a good Psi Chi advisor you want the Psi Chi chapter to do well but not just the chapter. You want the students who make up the chapter to do well. You want them to have the experience of going to conferences, presenting posters and papers at conferences, authoring an article for *JPI*, whatever. Again, you're concerned. You care. It's not just the flash and the glitz of the chapter being the number one chapter or whatever. The Denmark award and several of the teaching awards I have received are very special to me because my students nominated me for them.

Schmidt: When the Great Plains Student Psychology Convention began in 1981, it was comprised mostly of Kansas students. Did you have any idea that it would go on to be the largest undergraduate research conference in the region?

Davis: Absolutely not. I started that conference with my good friend Arnold Froese who's at Sterling College in Sterling, Kansas. He had brought some students to Emporia State to hear a guest speaker and his students and my students were across the way talking and getting together and doing what we thought was a good thing. At that point we thought, well why don't we formalize this and make it a yearly event and that's how the Kansas Students' Contributions to Psychology Convention and Paper Competition began. In the beginning we focused on attracting Kansas students. Then we started getting students come from Nebraska and Missouri and it's unbelievable how much it's grown over the years.

Harris: Why do you feel it is important for undergraduates to have the opportunity to share their research with peers?

Davis: I think there are several reasons. We can talk about things like developing good presentation skills, whether they be visual presentation with a poster or oral presentations with a paper, good writing skills in terms of preparing these posters and papers, good research skills in terms of conducting the research, or good analytical skills they used to analyze their data. Yes – even if you're not going off to graduate school you have acquired skills that make you marketable in a number of different ways. I hope the *JPI* readers won't say to themselves that there are no jobs for psychology majors with a bachelor's degree. That is absolute bologna. The jobs are there; you just need to know how to market yourself. Students need to do what I call a skills inventory. For example, when I teach a class called The Professional Psychologist, I go into class and say, "Take out a piece of paper and write down 75 skills that you have acquired as a psychology major." Can you do it? You may think that it is impossible, but you can. All you need to do is make an inventory of the skills that you have. Your completed skills inventory will help you market yourself in a very broad way.

> *The jobs are there; you just need to know how to market yourself. Students need to do what I call a skills inventory.*

Additionally, if you're planning on going to graduate school, research has shown that nearly everybody who applies is going to have the big three – a good GPA, good GRE, and great letters of recommendation. So what gets you in if everybody has those three? Now we are in the realm of what are known as "second-order criteria." The most important second-order criterion is having published a paper in a journal. Right behind that criterion is presenting a paper at a conference. In short, taking advantage of opportunities like presenting a poster or paper at a conference and publishing a paper in a journal can have very important and lasting effects.

Schmidt: Why do you think it took so long for an undergraduate research conference to be created?

Davis: That's an interesting question that I really don't have a good answer to.. I think the undergraduate research conference, as we know it today, is an outgrowth of the teaching conferences. Back in the mid 1980's the first regional teaching conference was established at the University of Southern Indiana by Joe Palladino, and very quickly after that he started a regional undergraduate student conference. I really believe it was the right thing to do at the right time. . Teachers seem to be the ones who really have encouraged the students to go to these conferences. The faculty who are into high-level, grant –supported research typically do not involve many students. In fact there are many faculty who do research and have no conception that there is such a thing as a student research conference. So, if my reasoning is correct, then the teaching movement had to get underway and grow before the student conferences could flourish. Student conferences appeal to teachers because they allow students and teachers an opportunity to get together. Student conferences do have benefits for faculty. They allow faculty to get together to talk about student research and other issues, such as collaborating on projects with students from other universities. I've done that frequently over the years.

Harris: What are some of the lessons you believe students learn when conducting and presenting research?

Davis: In addition to the benefits that we've already discussed, there definitely are some lessons to be learned. For example, you learn how to answer questions—both as you are designing and conducting your project and when you are presenting your results at a convention. Also, when you present your research at a convention, you learn that you're not going to die. Even if you have presented an oral paper and the audience asks questions when you are finished, you will survive. So yes,

the ability to field and answer questions is a valuable lesson that is learned.

Schmidt: As an editor for the *Psi Chi Journal of Undergraduate Research*, what do you believe your greatest contribution to Psi Chi has been?

Davis: If I have made any contributions to Psi Chi, it probably is just having been involved. I was there at a time when Psi Chi was going through some major transitions. I think just being involved and being open to and willing to think about new ideas and new programs was a contribution.

Harris: If there was one thing that an undergraduate student could do to improve his or her chances of acceptance into graduate school, what would it be?

Davis: This is another difficult question to answer because there are so many variables that need to be taken into account, such as GPA, GRE scores, and so forth. However, if there is one thing that any student can do to increase his/her chances of being accepted into a graduate program it would have to be involvement in research. However, as we've already mentioned you cannot stop when the project is completed. You need to do the research, analyze it, write it up, and continue on with it to the presentation and publication stages. That would be the best advice I could give any student. You learn many skills and lessons, plus you achieve the secondary admission criteria we mentioned a few minutes ago.

Additionally, you have enhanced your letters of recommendation by being involved in research. Your faculty research advisor will know you,

> *...if there is one thing that any student can do to increase his/her chances of being accepted into a graduate program it would have to be involvement in research.*

your skills and abilities much better because of your research involvement. Clearly, the better your recommenders know you, the better they can write more specific, detailed, and stronger letters on your behalf. You don't want somebody to just write a one-page, generic sounding letter that says "She (he) sat in my classroom and was really a good student who paid attention during lectures. Her (his) test scores were pretty good too. I think

she (he) will do well in your graduate program."

Schmidt: Do you think there are a lot of those?

Davis: Oh yea, I think a fair number of letters like this are received each year. I was department chair for 13 years. I saw every letter of recommendation that came in for our graduate program. It is hard to believe, but there always were some that were written in pencil. That is a sure kiss of death.

Harris: We have one more question for you.

Schmidt: Would you be willing to tell us about yourself as a person, not as a professor? For example, what about your family, your interests, and your hobbies?

Davis: Sure. I'll tell you about my family first. My wife and I met when I went into her introductory psychology class at SMU asking for participants for a research project I was conducting for one of my classes. This was before there were IRB's and subject pools. You had to go into each class and ask for volunteers. She volunteered. I liked her and we went for coffee after the research was completed. We were married on the campus at SMU in the Episcopal chapel in 1964. We have been married 45 years. My first job was in upper east Tennessee and I mention that because it was in upper east Tennessee that I became passionate about my hobby. I love traditional American folk music. Passionately. To the extent that, before I left that area, I had started a small record company, which continued when I went to Austin Peay State University in Clarksville Tennessee, which is the middle of the state. During the seven years we were in Clarksville, the record company grew and I ended up with 45 LP's in our catalog and two Grammy nominations. We came in second one year. But I'm running the record company as a hobby out of my basement while I'm being a full time teacher and doing research. There was no way we could beat Muddy Waters and some of the big names but it was fun. The passion for the music grew out of my interest in collecting records. Currently I have 14,000 records in my collection-- all of the records are old-time traditional folk music, traditional blues, and 1950's rock and roll. Currently I've been assisting the Arts Center of Cannon County Tennessee on a National Endowment for the Arts grant project to reissue in CD format a large number of the LPs that I produced. So far 15 LPs have been released and 6 more will be released this fall.

Classic cars would be another passion. In addition to my wife's 1953 Ford we have a 1964 Malibu super sport convertible, which we drive all the

time. If you have cars like these, I believe that they should be driven. It's just like my records. I'm not going to put them in a safety deposit box. I play and enjoy them. Recently I also have started very small collection of musical instruments; it now consists of three guitars. One of them is the last guitar that Carl Perkins, who is famous for writing and recording *Blue Suede Shoes*, played in a public concert. It was hand-signed by Perkins after the concert was over. It still has the original strings on it. Those are the kinds of instruments that I'm looking for.

In addition to writing books and doing the music things, I also have a 6-year-old grandson who keeps us very busy. He lives about 90 miles away, so we get to see him frequently.

Harris: What year were you nominated for a Grammy?

Davis: That would be 1976 or 1977. It was an album of traditional old-time music and was nominated in the ethnic folklore category.

Harris: I can't even wrap my head around everything you've been able to do. It's so much and so different and so cool.

Schmidt: I could never image doing all of that.

Davis: Why? It just happened. Maybe I just have Attention Deficit Disorder. Realistically, I've been able to do as many things because I have a lot of interests. There are a lot of things I like. Also I have the good ability to be able to work in as short as 10-15 minute blocks and get something done. I have several small tables at home and there are little piles on the tables. So I go to a pile, pick it up, work on it for about 10-15 minutes, go to another pile and do the same, and so it goes pretty much all the time. On the plane coming in yesterday, I read. I read passionately. This is something that started when I took early retirement several years ago. In Emporia I read almost exclusively psychology books and journals, but now I'm reading all sorts of nonprofessional books. It all started with Dan Brown's "The Da Vinci Code." That book opened a whole new vista of reading possibilities for me. During the past 8 years I've read 250 or so books. I particularly like mysteries and suspense thrillers, especially books by Catherine Coulter, Iris Johansen, Lisa Gardner, and James Patterson.

Psychologically Speaking

Commitment to Critical Thinking
An Interview with
Diane Halpern

Krystine Hoefer, Ashley Look &
Richard L. Miller

University of Nebraska at Kearney

Diane F. Halpern is Chair and Trustee Professor of Psychology at Claremont McKenna College. She was the founding director of the Berger Institute for Work, Family, and Children. The Institute is an educational and research organization that investigates the complex interactions of work and family. She has won many awards for her teaching and research, including the American Psychological Foundation Award for Distinguished Teaching. In addition to her books on critical thinking and work-family balance, Dr. Halpern has published over 350 articles and book chapters. Dr. Halpern has served as president of the American Psychological Association, and the Society for the Teaching of Psychology. She recently chaired the National Conference on Undergraduate Education in Psychology that produced the edited book Undergraduate Education in Psychology: A Blueprint for the Future of the Discipline (2009, APA Books).

Miller: The *Journal of Psychological Inquiry* publishes undergraduate student research. In addition, there is a Special Features section that serves a variety of purposes. It is a forum for student essays on topical issues and also features, from time to time, articles that provide information of interest to both faculty and students related to the research process. We have asked you for this interview in order to explore your thoughts on the role of undergraduate research in teaching. The audience that this interview is designed primarily for are students, and secondarily for faculty. Particular emphasis is on the scholarly component of teaching and learning and how that relates to students conducting research and subsequently presenting and publishing the results of that research. The two students who will be talking with you are both undergraduates from the University of Nebraska at Kearney. Krystine Hoefer is a senior at the University of Nebraska at Kearney from Elgin, Nebraska. She will be graduating in 2010 with a major in psychology and a minor in criminal justice. After graduation, she plans on pursuing a doctorate in forensic psychology. Ashley Look graduated from UNK in 2009 and is currently enrolled in the MS in counseling program at Abilene Christian University.

Look: You grew up in inner-city Philadelphia. What motivated you to seek a college degree?

Halpern: That's an interesting question for a number of reasons. I had a hard time understanding where I would be going but had a couple of motives. I was in drafting and a drafting teacher really went out of his way encouraging me to continue my education. I really couldn't imagine going to college; that was not even a world I could have thought of. I had applied to a two-year technical school in drafting but I couldn't even imagine anything that grand. My boyfriend at the time said I should apply to college. At that time in Philadelphia, the person who graduates at the top of the class in public school was awarded a full tuition scholarship to University of Pennsylvania -- Ivy League. It was something I would have never known, and yet I turned out to be that person. It was amazing. I wasn't from a family that went to college. I remember telling my father I was going to Penn and he thought I was telling him I was going to work at the Penn railroad. That was the only Penn he knew. Had it not been for that full tuition scholarship plus an Ivy League education, the whole idea really wouldn't have been there.

Look: You originally went into college as an engineering major. When you changed over to Psychology what did you envision yourself doing at that time?

Halpern: The switch happened interestingly. My then boyfriend, who has now been my husband for all these many years, was taking an introductory psychology class with Henry Gleitman, who later wrote a best-selling intro book. Henry is an actor; he acts in theater and he had these amazing intro classes. Just sitting there I felt that psychology was asking and answering every important question in the world. I just knew that this was something I always would want to do. What I would do with it was unclear but I felt

that was something I really would love studying for four years. When I finished I was in Philadelphia and so I went nearby and enrolled in the masters program at Temple University. Somewhere along the line there I realized that what I really loved doing was being on college campuses; studying, reading, and doing research. On that path I think there was a sudden dawning of what would be right for me.

Look: Were there college experiences or courses that changed your life?

Halpern: Sitting in on that introductory psychology class opened a new world to me. I didn't really know what psychology was and I was no better informed than I think a lot of the general public is today. That was definitely one of those life-changing moments. A research project my senior year with a faculty member, Francis Irwin, and my senior thesis in college became a *Journal of Experimental Psychology* publication. I think that was one of those experiences that changed my life as well.

> *Sitting in on that introductory psychology class opened a new world to me. I didn't really know what psychology was and I was no better informed than I think a lot of the general public is today. That was definitely one of those life-changing moments.*

Look: Who or what in your life would you say influenced you the most with regard to your career objectives?

Halpern: I think there were a couple of mentors along the way who showed me this whole world of fascinating questions. I think those are the people who tell you that you have the ability to do things. Someone has to tell you that this is what you can do. I think opening psychology textbooks and just sort of getting lost in them influenced me. So I think some text book authors opened the field without ever knowing their audience.

Look: What interested you in studying gender differences in cognition?

Halpern: It came about in an exciting way. When I was in graduate school I was supposed to teach a special honors section of Introduction to Psychology. I was looking forward to it but then the class was can-

celled because of low enrollment. There was a problem with how they were giving honors credits and at the very last minute the class was not going to be offered. Classes had already started. So instead I had to TA in Psychology of Women, something I knew nothing about. I'm a cognitive psychologist and as a result of that TA experience, my first job at a college was as a lecturer at University of California at Riverside where I was teaching Cognitive Psychology and Psychology of women. The same questions kept coming up in both places and it really was about the sex differences in cognition. Interestingly, at the time I felt a lot more confident that I knew what the right answers were than I do now after having spent an unbelievable amount of time studying it. But that's how it happened. In some sense it was serendipity that I became a TA in that class. It certainly wasn't one I would have selected, yet my academic interests just sort of veered off. The two came together because cognition is what I knew and it looked like a question that needed a serious and careful answer.

Look: What does success mean to you? How do you judge it?

Halpern: Success is clearly something that comes from inside of you. Success is a feeling; you can feel successful in things that, from the outside, clearly don't appear successful. For instance, I'm a pretty bad athlete so you know if I return the ball in tennis that's a success, whereas for most people that would be pretty pathetic. But you know success for me is really my own sense of personal growth; my own sense of accomplishing something that was difficult. It can take its form in a variety of places in life. I think about parents and successful children. I don't mean how much money they make. I think about success in getting an email from a student years later that says what a difference you've made in their life. That's success. None of those are outward manifestations but even so they are the ones, I think, that really count.

Look: What is your favorite part of your current job and why?

Halpern: My favorite part of my current job really is the teaching. I'm truly energized when I'm in the classroom. It's great when one of my students asks a really insightful question that I never thought of because suddenly I'm thinking "I can't believe I never thought of it that way." I always learn from my students, they're continuously seeing things from new perspectives and asking questions or making comments.

Look: Describe a situation in which you did "all the right things" and were still unsuccessful. What did you

learn from the experience?

Halpern: I can think of a lot of places where I have not been successful, but I can't think of too many things where I have done all of the right things. I don't think if I could do that off the top of my head, I need that question in advance, to think. How many times can you look back and say I did everything right? When it doesn't turn out well you can almost look back and figure out what you should have done differently. I can think of one situation where I made a bad hire. I went back and tried to analyze what had gone wrong in the hiring process because I do a lot of hiring and it's extremely important to hire well. I looked and I looked and couldn't figure out what I had done wrong. I didn't learn anything from that lesson except that you can't always judge how the future will turn out with a person you don't know. Someone may look great when you first meet them and interact. It's not quite the same thing when you have a long term type of relationship. I think that maybe that's a lesson to learn regardless: it doesn't have to be with hiring. Where you know your initial impressions are wrong and you go back and wonder "Was there something I should have seen?" It's a terrible thing to have to fire somebody. It's just awful and you never want to be in that position, especially when it was simply a bad hire. That's one point in time that comes to mind where I've looked back to determine what I've learned yet come away with nothing. Sometimes I'm going to make a mistake and I won't know why.

Hoefer: What are your hobbies?

Halpern: I don't have a lot of hobbies. I work like a crazy person. Just this morning I sent someone an email saying "I'm going to work less. I promise, I promise. As soon as I get through this." And hobbies. I like to read. I really love doing things with my grandchildren. I just adore it. Just going to the park with them and playing ball. I don't know if that's a hobby but it's what I do to relax. It's what I really enjoy doing. I dragged my husband to dance lessons quite a few times. I don't know if you'd call that a hobby - it was more like agony. But I enjoyed it. I never got any better at it. I seem to defy all laws of learning in my athletic prowess, in that everyone else gets better except me. Interestingly I'm still enjoying it because it's not something where I'm competitive.

Hoefer: What have you read lately, and what are you reading now?

Halpern: I just finished a book I really like a lot: "Out Stealing Horses" by a Norwegian author. Apparently it's a classic in Norway (I read it in English). I enjoy books that are set in historical or other locations because I enjoy learning about the historical period

at the same time that the characters are engaged. That's the one I just finished. I recommend it.

Hoefer: You have received countless awards throughout your career. Which one is the most meaningful to you?

Halpern: I think the ones for teaching that came on my own campus. I was in the California State University system, which is gigantic. I won the System Wide Award, which is obviously a very big honor. But, in some sense, I almost felt that I was symbolic of all the really good teachers out there who hadn't won, and that there are plenty of really good people who are never recognized. But it was the one that was given on my own campus by the people who knew me that was much more meaningful. I was very grateful for the larger awards and for the recognition. But I know that anytime there's recognition like that it's really symbolic for all of those other really good teachers.

Hoefer: What are your views on undergraduate research? Did you do research as an undergraduate?

Halpern: I think undergraduate research is essential. I think it's where you must start learning to ask research questions. And even if you're never going to be a researcher, never going to do a study in your life I think it's just a critical part of being a good thinker and a research consumer. I think it should be required of everybody. I think along the way people get the bug. But it's not a bug you would necessarily pick for yourself unless someone pushes you into it. I already mentioned that I did undergraduate research, which was my first publication. The faculty mentor I worked with was really quite old at the time. Soon after the research was published, he died. To the people who knew him that was a significant paper because it was his last one. It was with an undergraduate student.

> *I think undergraduate research is essential. I think it's where you must start learning to ask research questions. And even if you're never going to be a researcher, never going to do a study in your life I think it's just a critical part of being a good thinker and a research consumer.*

Hoefer: What do you consider to be your most significant accomplishment and why?

An Interview with Diane Halpern

Halpern: I'd like to think my most significant accomplishment is still ahead. I'm sort of hoping it's not all behind me, although as I age I have come to the realization that it may well be. I understand that every one of us is makes a little teeny contribution. We each add a small grain to someone's life and those teeny contributions may be my most significant accomplishment.

Hoefer: You have taught in a lot of different areas and countries, what is the biggest difference between students overseas vs. here and are there any major differences in their view of psychology?

Halpern: Absolutely. I taught in a number of places and I've lived in a number of places. I think it's important to get outside the U.S. to understand the U.S. I don't think we can see ourselves from inside. You can learn so much more. And I don't mean just traveling as a tourist and staying at the Hilton. I really think you have to be in a university--embedded in life and faculty and students. Those are the kinds of experiences where you can really know a place as opposed to staying at a hotel for a week. People do think about psychology very differently in other countries. I was in China last year. I spent a semester in Hong Kong. Psychology in mainland China is burgeoning. It's growing incredibly fast but it has a very short history. It certainly is not part of the everyday vernacular. And when you read about psychology in China, people talk as though it's a new idea. Sometimes it's thought of as a very Westernized idea. There are significant differences in how people think about psychology. I've had students tell me "I don't believe in psychology." I want to say well, you know, it isn't a religion. It isn't like I'm asking you to give up your religion. We really need to explain the database for it and why you value empirical outcomes. It's deciding what you're going to believe or not believe. So yes, there are certainly big differences.

Hoefer: Do you have any advice for students entering the field to work or entering graduate school?

Halpern: Oh, yes. I'm never short on advice. You should throw yourself in to your work and find something that you love to study. And if there's something that you don't love that you need to know, then throw yourself even harder. Because it's only after you get through a lot of the initial hard work that things start to look good. There may be some topics that do not interest you, but once you've gotten over the initial learning hump you suddenly see a whole different landscape of fascinating questions. I would say get fully engaged in what you're doing - not make your studies an add-on. I understand that most students have to work, of course. But when they're there they should be there fully. School is so much better if you're prepared; if you're engaged. It's the students who are just trying to get by who really don't like school much. They would be much happier if, in fact, they threw themselves in more and got fully engaged. If possible, try to work on campus. Try to develop a close mentoring relationship. Don't be afraid to make mistakes. I think it's important that we make mistakes. If you're not making enough mistakes you're not reaching high enough.

> *You should throw yourself in to your work and find something that you love to study. And if there's something that you don't love that you need to know, then throw yourself even harder.*

Hoefer: What would you like to do next? Are there any major projects underway right now?

Halpern: I have a couple of really exciting projects underway. One I'm really excited about. I'm working with two incredibly good people (Keith Millis at Northern Illinois University and Art Graesser at University of Memphis) on a Department of Education Grant. We're designing an automated tutoring system. It's a computer game using the principles of gaming to teach students critical thinking scientific reasoning principles. It's all embedded in a storyline where aliens are invading the Earth. They're taking the Earth's resources with bad science. Trying to turn us all in to mindless consumers. It's your job to identify the aliens with their bad science. I'm so excited about the project. I believe in it so much. It's really exciting to be working with this whole interactive media. The people I'm working with are so incredibly smart and gifted. I really think it's a great project.

Invitation to Contribute to the
Special Features Section—I

Undergraduate students are invited to work in pairs and contribute to the Special Features section of the next issues of the *Journal of Psychological Inquiry*. The topic is:

Evaluating Controversial Issues

This topic gives two students an opportunity to work together on different facets of the same issue. Select a controversial issue relevant to an area of psychology (e.g., Does violence on television have harmful effects on children?—developmental psychology; Is homosexuality incompatible with the military?—human sexuality; Are repressed memories real?—cognitive psychology). Each student should take one side of the issue and address current empirical research. Each manuscript should make a persuasive case for one side of the argument.

Submit 3-5 page manuscripts. If accepted, the manuscripts will be published in tandem in the Journal.

Note to Faculty:

This task would work especially well in courses that instructors have students debate controversial issues. Faculty are in an ideal position to identify quality manuscripts on each side of the issue and to encourage students to submit their manuscripts.

Procedures:
1. All manuscripts should be formatted in accordance with the APA manual (latest edition).
2. Provide the following information:
   (a) Names, current addresses, and phone numbers of all authors. Specify what address and e-mail should be used in correspondence about your submission,
   (b) Name and address of your school,
   (c) Name, phone number, address, and e-mail of your faculty sponsor, and
   (d) Permanent address and phone number (if different from the current one) of the primary author.
3. Include a self-addressed stamped envelope of proper size and with sufficient postage to return all materials.
4. Send three (3) hard copies and one (1) electronic copy (CD-rom) of the 3-5 page manuscript in near letter quality condition using 12 point font.
5. Include a sponsoring statement from a faculty supervisor. (Supervisor: Read and critique papers on content, method, APA style, grammar, and overall presentation.) The sponsoring statement should indicate that the supervisor has read and critiqued the manuscript and that writing of the essay represents primarily the work of the undergraduate student.

Send submissions to:

Dr. Richard L. Miller
Department of Psychology
University of Nebraska at Kearney
Kearney, NE 68849

Invitation to Contribute to the
Special Features Section—II

Undergraduate students are invited to contribute to the Special Features section of the next issue of the *Journal of Psychological Inquiry.* The topic is:

Conducting Psychological Analyses – Dramatic

Submit a 3-5 page manuscript that contains a psychological analysis of a television program or movie.

Option 1—Television Program:

Select an episode from a popular, 30-60 min television program, describe the salient behaviors, activities, and/or interactions, and interpret that scene using psychological concepts and principles. The presentation should identify the title of the program and the name of the television network. Describe the episode and paraphrase the dialogue. Finally, interpret behavior using appropriate concepts and/or principles that refer to the research literature. Citing references is optional.

Option 2—Movie Analysis:

Analyze a feature film, available at a local video store, for its psychological content. Discuss the major themes but try to concentrate on applying some of the more obscure psychological terms, theories, or concepts. For example, the film *Guess Who's Coming to Dinner?* deals with prejudice and stereotypes, but less obviously, there is material related to attribution theory, person perception, attitude change, impression formation, and nonverbal communication. Briefly describe the plot and then select key scenes that illustrate one or more psychological principles. Describe how the principle is illustrated in the movie and provide a critical analysis of the illustration that refers to the research literature. Citing references is optional.

Procedures:

1. All manuscripts should be formatted in accordance with the APA manual (latest edition).
2. Provide the following information:
    (a) Names, current addresses, and phone numbers of all authors. Specify what address and e-mail should be used in correspondence about your submission,
    (b) Name and address of your school,
    (c) Name, phone number, address, and e-mail of your faculty sponsor, and
    (d) Permanent address and phone number (if different from the current one) of the primary author.
3. Include a self-addressed stamped envelope of proper size and with sufficient postage to return all materials.
4. Send three (3) hard copies and one (1) electronic copy (CD-rom) of the 3-5 page manuscript in near letter quality condition using 12 point font.
5. Include a sponsoring statement from a faculty supervisor. (Supervisor: Read and critique papers on content, method, APA style, grammar, and overall presentation.) The sponsoring statement should indicate that the supervisor has read and critiqued the manuscript and that writing of the essay represents primarily the work of the undergraduate student.

Send submissions to:
Dr. Richard L. Miller
Department of Psychology
University of Nebraska at Kearney
Kearney, NE 68849

Invitation to Contribute to the Special Features Section—III

Undergraduate students are invited to contribute to the Special Features section of the next issue of the *Journal of Psychological Inquiry.* The topic is:

Conducting Psychological Analyses – Current Events

Submit a 3-5 page manuscript that contains a psychological analysis of a current event. News stories may be analyzed from the perspective of any content area in psychology. The manuscript should describe the particular event and use psychological principles to explain people's reactions to that event.

Example 1: Several psychological theories could be used to describe people's reactions to the destruction of the World Trade Center on September 11, 2001. Terror management research has often shown that after reminders of mortality people show greater investment in and support for groups to which they belong and tend to derogate groups that threaten their worldview (Harmon-Hones, Greenberg, Solomon, & Simon, 1996). Several studies have shown the link between mortality salience and nationalistic bias (see Greenberg, Simon, Pyszczynski, & Solomon, 1992). Consistent with these findings, the news reported that prejudice towards African Americans decreased noticeably after 9/11 as citizens began to see all Americans as more similar than different.

Example 2: A psychological concept that could be applied to the events of September 11 would be that of bounded rationality, which is the tendency to think unclearly about environmental hazards prior to their occurrence (Slovic, Kunreuther, & White, 1974). Work in environmental psychology would help explain why we were so surprised by this terrorist act.

The analysis of a news event should include citations of specific studies and be linked to aspects of the news story. Authors could choose to apply several psychological concepts to a single event or to use one psychological theory or concept to explain different aspects associated with the event.

Procedures:

1. All manuscripts should be formatted in accordance with the APA manual (latest edition).
2. Provide the following information:
    (a) Names, current addresses, and phone numbers of all authors. Specify what address and e-mail should be used in correspondence about your submission,
    (b) Name and address of your school,
    (c) Name, phone number, address, and e-mail of your faculty sponsor, and
    (d) Permanent address and phone number (if different from the current one) of the primary author.
3. Include a self-addressed stamped envelope of proper size and with sufficient postage to return all materials.
4. Send three (3) hard copies and one (1) electronic copy (CD-rom) of the 3-5 page manuscript in near letter quality condition using 12 point font.
5. Include a sponsoring statement from a faculty supervisor. (Supervisor: Read and critique papers on content, method, APA style, grammar, and overall presentation.) The sponsoring statement should indicate that the supervisor has read and critiqued the manuscript and that writing of the essay represents primarily the work of the undergraduate student.

Send submissions to:
Dr. Richard L. Miller
Department of Psychology
University of Nebraska at Kearney
Kearney, NE 68849