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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

Editorial

Sitting down to write this, my inaugural editorial, I am struck by the magnitude of what it takes to pull together a single issue of *JPI*, and likewise, inspired by the dedication of my predecessor, Dr. Mark Ware who labored over details, both big and small, that may have gone un-noticed to the casual observer, but in the aggregate have made the journal what it is today. It is with a sense of awe and profound un-worthiness that I begin my tenure as Managing Editor of JPI. My desire is to bring the same level of dedication and commitment to the journal that Dr. Ware has given over the past 11 years. If not for the kind and capable direction of Mark and the professionalism/collegiality of the editorial board I would have been hesitant to accept such an undertaking.

One of the largest factors affecting my decision to take this position was my respect for the effort put forth by the students who submit to *JPI*. Landrum (2002) clearly noted benefits of undergraduate student involvement in research, including:

- "Acquisition of skills and knowledge not easily gained in the classroom,

- Opportunity to work one-on-one with a faculty member,

- Opportunity to contribute to the advancements of the science of psychology,

- Exposure to general research techniques helpful for pursing later graduate work,

- Opportunity to practice written and oral communication skills by preparing for and attending professional conferences and preparing and submitting manuscripts for publication, and

- Cultivation of a mentoring relationships with a faculty member that will be helpful for acquiring letters of recommendation" (p. 15).

I would like to echo the comments of Dr. Landrum and commend those students who are willing to "put themselves out there" by following through to submitting for publication. The process of publication involves hard work and dedication to see the effort through to fruition.

To the student readers...I am proud to say that I have been your shoes. My first publication stemmed from an undergraduate Experimental Psychology class project. I remember how nervous I was mailing my manuscript off, not sure what kind of response I would receive, and how proud I was when I saw my work, my name, and my efforts in print! The experience was literally life altering because it was at that point in my academic career that I caught the research bug, and trust me, it is infectious!

To the faculty sponsors...again, I have been in your shoes! I have sponsored numerous student presentations at local, regional, and national conferences, and have in turn encouraged many of those students to submit their projects for publication. The role of the faculty sponsor is vital. Your guidance through the research project, feedback during the writing development, and mentoring during the submission and revision process has such a powerful effect on the quality of articles we ultimately see in *JPI*. The editorial team appreciates your countless hours of self-less giving toward the professional development of future scholars in psychology.

Finally, I end by noting that I have a profound gratitude for the hard work of the editorial board. Without their dedication, this publication would not be what it is today. In that same vein, I would like again to recognize the contribution of Dr. Ware. Although he has retired from his position of Managing Editor, because of his devotion to the *Journal of Psychological Inquiry*, the editorial team has decided to acknowledge his contributions by giving him the title of Founding Editor.

In conclusion, I am delighted to be the new Managing Editor for *JPI* and look forward to being a part of the strong tradition of publishing exclusively undergraduate research in psychology.

Susan R. Burns
Managing Editor

Reference
Landrum, R. E. (2002). Maximizing undergraduate opportunities: The value of research and other experiences. *Eye on Psi Chi, 6*, 15-18.

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).

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 five (5) copies 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).

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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.

2/06

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Effect of Composer's Gender on Evaluation of Classical Music

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In a replication of Colley, North, and Hargreaves (2003), attitudes toward a selection of classical music were examined to determine whether a promale gender bias exists. Music was attributed to either a male composer or a female composer. Eighty-eight undergraduate participants were randomly assigned to one of four groups: 1) male composer with name given, 2) female composer with name given, 3) male composer with biography, or 4) female composer with biography. Attitudes toward the music (e.g., interestingness, innovativeness) were measured. No evidence was found to support a promale bias in the ratings of this selection.

Does the gender of an artist affect how their art is perceived? More specifically, does the gender of a musical composer affect how a listener judges that composer's music? Throughout history, men have dominated the arts in western cultures, and music is no exception. There have been many more male composers recognized than female composers in western music (Farnsworth, 1969). Musicologists and music psychologists have noted that very few female composers have gained notoriety (Farnsworth, 1969; O'Neill, 1997). For example, one can readily think of the names of numerous famous male composers, such as Bach, Beethoven, and Mozart. However, it is difficult for many people to recall the name of even one famous female composer.

A perceived divide between a man's and a woman's abilities is prominent in the area of performance. There are many more male performers than female performers today, and they enjoy a higher status as well (North & Hargreaves, 1995). According to O'Neill and Boulton (1996), gender differentiation plays a role in the selection of instruments by students when entering music programs in schools. The instruments that each sex chooses to play tend to fit stereotypical categories of male instruments (e.g., drums or trumpet) or female instruments (e.g., violin or flute). Even new technologies that help musicians practice or compose music favor boys more than girls because boys tend to have more interest in, and more experience with, computers and technology than do girls (Comber, Hargreaves, & Colley, 1993).

So, why do people hold these and other stereotypes to be true? Hamilton and Trolier (1986) suggested that stereotypes arise because people categorize individuals into different groups to apply common labels and reduce the amount of information that our minds must store, retrieve, and understand. Socialization, say Hamilton and Trolier, perpetuates the stereotypes by using social learning processes to extend and support such ideals to others within the culture.

Stereotypes of women's inferiority to men have been around since Aristotle's time. Aristotle was quoted as having said, "woman may be said to be an inferior man" (cited in Goldberg, 1968). These stereotypes held during, and probably before, Aristotle's time were communicated to each subsequent generation through the processes of socialization. Goldberg, along with other researchers (Lenney, Mitchell, & Browning, 1983; Paludi & Bauer, 1983; Paludi & Strayer, 1985), attributes the anti-female bias to these "sex stereotypes or prejudicial beliefs" (Top, 1991, p. 75).

The underlying question of concern in the present study was whether men are perceived to be more competent composers than women based on the characteristics and the listener's perceived quality of the composition. Goldberg (1968) examined a similar question, focusing on written works, by studying the responses given by female participants who rated various journal articles that were attributed to either a male or a female author. These articles featured themes in the fields of art history, education, dietetics, and law and city planning. The articles were attributed to either a fictitious male author (John McKay) or to a fictitious female author (Joan McKay), with the same biographical information provided for each author. Participants read the article and the biographical information, with either John or Joan McKay listed as the author, and then rated the articles. This procedure has become known as the Goldberg Paradigm (Colley et al., 2003; Top, 1991). Goldberg found that the articles attributed to John McKay were rated more favorably than those attributed to Joan McKay (Top, 1991). He concluded that there was a promale bias among those who rated these journal articles.

The use of sexually ambiguous names, such as Chris (Paludi & Strayer, 1985), or initials, like J. T. McKay (Paludi & Bauer, 1983), results in the same promale bias that Goldberg found. In addition, in studies by Paludi and colleagues, article topics had an effect on participant's judgments. In these studies, the articles were classified as either masculine or feminine based on stereotypical gender characteristics of the topics. Perceived masculine topics were then attributed to have a male author whereas perceived feminine topics were credited to a female author (Paludi & Bauer, 1983; Paludi & Strayer, 1985).

The amount of information given about an author has an effect on stereotyping as well (Deaux & Lewis, 1984). Deaux and Lewis found that the less information about the author given, the more the participants will stereotype and make assumptions. If given only the gender, participants create a set of traits that they believe fit the person. When

people are given information beyond gender, the influence of gender alone can be overcome. Locksley, Borgida, Brekke, and Hepburn (1980) found similar results. Specifically, these researchers found that when little is known about an individual, stereotypes have more of an effect on how others judge the person.

Colley et al. (2003) used the Goldberg Paradigm to find a gender bias in ratings of two different selections of New Age music. These researchers manipulated two variables: the gender of the composers and the amount of information given about the composers. Colley et al. placed participants in one of four groups and had them listen to the musical selections while reading a small amount of information about a fictitious male or female composer. The information was either just a name or a name and a brief biography. Each participant then rated the musical selections on eleven different measures. Colley et al. found evidence of a promale bias in the attitudes of the participants when rating the selections of music. Also, these researchers found that there were higher ratings for the male composers on attributes relating to musical competence. As Colley and colleagues predicted, the amount of information provided about the artists affected how the pieces were rated. There was a tendency for participants to rate the music in the female-biography condition more highly than the music in the female name-only condition.

The present study was a replication and extension of Colley et al.'s (2003) research. The purpose was to determine whether the gender bias they found among European college students when listening to new age music also exists among American college students when listening to classical music. Specifically, the Goldberg Paradigm was used to examine judgments about a selection of classical music in the present study. We predicted a promale bias would occur overall. However, we also predicted a stronger bias, indicating more stereotyping, in the name-only condition as opposed to the biography condition.

Method

Participants

Eighty-eight undergraduate psychology students from Southwest Missouri State University volunteered to participate in the study. Specifically, there were 27 men and 61 women. One participant indicated that he recognized the selection of music and was able to correctly name it. Therefore, this participant's data were not used in any of the analyses. Due to the unequal number of men and women in the participant pool, a larger number of females were used for each group. However, there was approximately the same ratio of women to men in each group (the women to men ratio for groups 1 through 4 was, 16:6, 14:8, 17:5, 14:8 respectively). The mean age was 19.19 years old, and ranged from 18 to 37 years old. Fifty-seven of the participants indicated that they had some sort of musical training in the past.

Volunteers received course credit for their participation.

Materials and Apparatus

A selection from Dvořák's Symphony Number 9 (The New World Symphony), third movement (Scherzo – Molto Vivace; 2002, track 3) was used as the auditory stimulus. A 2 min and 16 s portion of the selection was used, beginning at approximately two min into the movement. This section of the piece was chosen for its variations in loudness and instrumentation. Each participant listened to the selection on a Sony CD Walkman model D-E350 using Sony Dynamic Stereo headphones model MDR-CD60.

The questionnaire contained 11 different measures: forceful, individualistic, innovative, warm, soothing, gentle, technically competent, expressive, artistic merit, interesting, and how much the participant liked the selection. For each measure, all participants rated the selection on a Likert scale from 0 to 10. The scale was labeled on two points, 0 = *not at all* and 10 = *very much*. The rating scale with the 11 different measures was taken from the Colley et al. (2003) study. The questionnaire also included questions regarding whether participants recognized the selection and could name it, as well as demographic information to determine their gender, age, and if they have any experience playing music or expert knowledge of music.

Procedure

Testing occurred in one 10 min session. Each participant was randomly assigned to one of the four conditions: 1) male composer with a name given, 2) female composer with a name given, 3) male composer with a biography, or 4) female composer with a biography. The name, Chris Johnson, and the biography that was used were all identical in each group, excluding the independent variable: gender of the composer. The information given in the two name-only conditions included the composer's name and a second sentence stating that the piece of music was his or her fourth composition. The two biography conditions stated the composer's name and gave information about his or her childhood and education. Participants read the instructions and artist information. Each participant then put on the headphones and pressed the play button, making sure not to touch the volume or other buttons, as the directions indicated. Participants then listened to the musical selection. After the music stopped, participants rated the selection using the questionnaire. Participants were debriefed at the conclusion of the experiment.

Results

A 2 (composer gender) x 2 (amount of information given: name-only or biography conditions) x 2 (participant gender) between-subjects ANOVA was used to analyze the data. This analysis was done for each of the rating categories: forceful, individualistic, innovative, warm, soothing, gentle, technically competent, expressive, artistic merit, in-

Table 1

Means and Standard Deviations for the Ratings of a Piece of Classical Music

| | Name Only | | | | Biography | | | |
| | Male Composer | | Female Composer | | Male Composer | | Female Composer | |
DV	Men	Women	Men	Women	Men	Women	Men	Women
Forceful	5.7 (2.5)	5.8 (2.4)	4.9 (2.5)	5.6 (1.7)	5.8 (1.5)	6.1 (2.3)	6.5 (1.5)	5.5 (1.8)
Individualistic	5.5 (1.9)	5.6 (2.3)	5.5 (1.5)	7.3 (1.7)	7.0 (1.6)	6.4 (1.4)	6.8 (2.1)	6.6 (2.0)
Innovative	5.7 (2.5)	5.8 (1.5)	5.6 (1.8)	6.6 (1.6)	6.4 (1.5)	6.8 (1.5)	7.0 (1.6)	6.7 (1.4)
Warm	7.5 (1.5)	6.9 (2.1)	8.0 (1.1)	7.9 (1.5)	7.2 (1.8)	7.5 (1.9)	7.5 (1.2)	7.0 (1.8)
Soothing	8.3 (1.5)	6.9 (2.6)	7.9 (1.8)	7.7 (1.8)	7.2 (1.9)	7.6 (1.8)	8.6 (1.3)	8.0 (1.8)
Gentle	6.8 (1.0)	5.3 (2.4)	6.9 (1.9)	6.5 (2.1)	6.4 (2.6)	6.7 (2.2)	7.8 (1.6)	7.0 (1.9)
Technically Competent	6.3 (1.2)	7.6 (1.7)	6.9 (3.7)	7.5 (1.4)	7.6 (2.1)	7.0 (1.6)	8.3 (1.5)	7.6 (1.3)
Expressive	8.2 (1.3)	8.4 (1.4)	8.8 (1.0)	8.5 (1.3)	8.2 (1.9)	8.3 (1.7)	8.1 (2.6)	9.0 (1.2)
Artistic Merit	8.3 (1.0)	8.1 (1.8)	8.1 (1.7)	8.4 (1.2)	8.6 (1.1)	7.8 (1.6)	8.0 (1.5)	8.4 (1.3)
Interesting	9.0 (1.7)	7.7 (2.2)	8.6 (1.1)	7.5 (3.2)	7.8 (1.5)	8.2 (1.7)	8.0 (1.9)	8.0 (1.8)
Liking	7.5 (1.4)	7.6 (1.8)	8.4 (1.7)	7.3 (3.3)	7.4 (1.7)	7.7 (1.6)	7.5 (2.3)	8.0 (1.4)

teresting, and how much the participant liked the selection. After the Bonferroni Correction, an alpha level of .0045 was used for all tests. No significant main effects or interactions of composer gender, amount of information given, or participant gender were found for the measures of forceful, individualistic, innovative, warm, soothing, gentle, technically competent, expressive, artistic merit, interesting, or how much the participant liked the selection (in all cases, $p > .0045$). Table 1 shows the M and SD for all of the eleven attributes used to rate the composition.

Discussion

The data did not support either hypothesis. There are several possible explanations for the lack of support for the hypotheses. Perhaps college students are more open-minded than most of the population (LeBlanc, Sims, Siivola, & Obert, 1996). LeBlanc and colleagues proposed that as people grow into early adulthood, there is an increase in each person's "open-earedness," and their tolerance of different genres of music grows. Indeed, in the present study, the mean rating for liking was 7.68 on a 10-point scale. Perhaps the high level of liking for the piece of music in the present study minimized any bias that may have occurred.

Another potential explanation for the lack of gender bias in the present study is that the gender bias that has been found in previous research may not exist in the judgments of present-day American college students. The sexist attitude that may have pervaded Goldberg's (1968) time has possibly dissipated. Colley et al. however, found a promale gender bias on ratings of music as recently as 2003., but the Colley

et al. study was conducted with European participants. Perhaps a gender bias regarding music exists in Europe, but not in the United States.

Lack of support for the hypotheses in the present study may also be explained by the findings of Lenney et al. (1983). These researchers found that when they asked for an explicit judgment on a precise and exact trait as compared to forming broad judgments of overall qualities, there was a significant drop in promale bias. These researchers stated that "…compared to vague guidelines, specific instructions in evaluation may encourage subjects to engage in a relatively more detailed analysis of particular aspects of work, with the result that they gain and process a greater amount of information concerning the performance itself" (pp. 325-326). These researchers also stated that "…when evaluation instructions are vague, subjects' attention may 'wander' quite readily to the gender of the performer" (p. 326). The 11 different rating scales used as judgment criteria in the present study may have been too specific and may have reduced any gender bias that may have otherwise been revealed.

Perhaps, in combination with vague judgment criteria, such as "well composed," in place of "technically competent" and "artistic merit," one could find evidence for a promale gender bias in the evaluation of classical music that this study was unable to support. Future researchers should help to clarify these issues and determine if vagueness in rating guidelines leads to a promale gender bias in the evaluation of classical music. Further research should also focus on other types of music and on different types of musical artists, such as performers, composers, and students.

References

Colley, A., North, A., & Hargreaves, D. J. (2003). Gender bias in the evaluation of new age music. *Scandinavian Journal of Psychology, 44*, 125-131.

Comber, C., Hargreaves, D. J., & Colley, A. M. (1993). Girls, boys and technology in music education. *British Journal of Music Education, 10*, 123-134.

Deaux, K., & Lewis, L. L. (1984). Structure of gender stereotypes: Interrelationships among components and gender label. *Journal of Personality and Social Psychology, 46*, 991-1004.

Dvořák, A. (2002). Symphony number 9: From the new world [Recorded by the London Symphony Orchestra]. On London Symphony Orchestra Live: Dvořák Symphony No 9 [CD]. London: LSO. (1999)

Farnsworth, P. R. (1969). *The social psychology of music* (2nd ed.). Ames, IA: Iowa State University Press.

Goldberg, P. (1968). Are women prejudiced against women? *Transaction, 5,* 28-30.

Hamilton, D. L., & Trolier, T. K. (1986). Stereotypes and stereotyping: An overview of the cognitive approach. In J.F. Dovidio & S.L. Gaertner (Eds.), *Prejudice, discrimination and racism* (pp. 127-163). Orlando, FL: Academic Press.

Hargreaves, D. J., Comber, C., & Colley, A. (1995). Effects of age, gender and training in British secondary school pupils. *Journal of Research in Music Education, 43*, 242-250.

LeBlanc, A., Sims, W., Siivola, C., & Obert, M. (1996). Music style preferences of different age listeners. *Journal of Research in Music Education, 44*, 49-59.

Lenney, E., Mitchell, L., & Browning, C. (1983). The effect of clear evaluation criteria on sex bias in judgments of performance. *Psychology of Women Quarterly, 7*, 313-328.

Locksley, A., Borgida, E., Brekke, N., & Hepburn, C. (1980). Sex stereotypes and social judgment. *Journal of Personality and Social Psychology, 18*, 765-775.

North, A. C., & Hargreaves, D. J., (1995). Eminence in pop music. *Popular Music and Society*, *19*, 41-66.

O'Neill, S. (1997). Gender and music. In D. J. Hargreaves & A. C. North (Eds.), *The social psychology of music* (pp. 46-63). Oxford: Oxford University Press.

O'Neill, S., & Boulton, M. J. (1996). Boys' and girls' preferences for musical instruments: A function of gender? *Psychology of Music, 24*, 171-183.

Paludi, M. A., & Bauer, W. D. (1983). Goldberg revisited: What's in an author's name? *Sex Roles, 9*, 387-396.

Paludi, M. A., & Strayer, L. A. (1985). What's in an author's name? Differential evaluations of performance as a function of author's name. *Sex Roles, 12*, 353-361.

Top, T. (1991). Sex bias in the evaluation of performance in the scientific, artistic and literary professions: A review. *Sex Roles, 24*, 73-106.

The Effects of Moral Reasoning on Psychopathy in Children

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Historically, researchers and theorists have described a psychopath as "without conscience" (Hare, 1993). Research suggests that psychopathic individuals experience moral reasoning differently than non-psychopathic individuals and may exhibit a deficiency in moral development. Crucial to understanding the moral reasoning in psychopaths is the way in which a child with psychopathic-like traits experiences moral reasoning and whether a deficit in moral development exists in these children. This paper reviews the relevant literature regarding children and psychopathy and the way moral development differs in psychopathic individuals. Additionally, I suggest that a lack of moral reasoning in children with psychopathic traits impairs children and their manifestation of psychopathy.

Society appears increasingly concerned with psychopathy, but often associates psychopathy solely with the cold blooded killer, rapist, and conman who threaten the public's security. Psychopathy, however, is a complex topic that encompasses much more than this stereotype. Along with many features such as a lack of empathy and remorse, adults with psychopathy typically demonstrate deficits in moral reasoning (Blair, 1995). Even more significant than the issues surrounding the behavior of adult psychopaths is the potential diagnosis of psychopathy in children. Although research has identified key traits and assessment measures for psychopathy in children (Forth, Kosson, & Hare, 2003), researchers have ignored the development of moral reasoning in this area. This paper addresses key issues of moral development, psychopathy, and the extension of the two topics to children. Also, by integrating previous literature on psychopathy with the developmental and philosophical literature on morality in children, I believe deficits in moral reasoning significantly impact children with psychopathic traits.

Psychopathy and the PCL-R

Historically, researchers have defined psychopathy by a few key features first identified by Cleckley (1941) as a construct based on personality. Cleckley defined psychopathy as consisting of personality traits such as callousness, dishonesty, and superficiality. Conversely, Robins (as cited in Lilienfeld, 1998) proposed a behavior-based approach that has been a foundation for the diagnosis of Antisocial Personality Disorder (ASPD) in the Diagnostic and Statistical Manual-IV-TR (DSM-IV-TR; American Psychiatric Association, 2000). ASPD in the DSM-IV is characterized by a lack of regard for societal morals and rules, an inability to get along with others, with symptoms occurring before the age of 15 years. The diagnosis also includes violence, impulsiveness, and recklessness. Although many experts have debated the differences between ASPD and psychopathy, and some have asserted that the two are realistically the same construct, more recent and widely accepted definitions of psychopathy include not only the antisocial behavior but also the key per-

sonality traits not included in the ASPD diagnosis (Hare, 2003). These definitions are the basis for much of the ongoing research in the area of psychopathy, including the work of Robert Hare and the construction of the Psychopathy Checklist (PCL). Hare (2003) asserts that historically theorists have divided psychopathy into three categories. The first category consists of interpersonal traits, which includes grandiosity and the ability to manipulate. The second category of psychopathy is affective, referring to shallow affect and lack of empathy. Finally, Hare's third category is the impulsive and thrill-seeking lifestyle. The PCL and the more recent Psychopathy Checklist Revised (PCL-R) incorporate interpersonal/affective traits in Factor I and past antisocial or deviant behaviors in Factor II. Factor I is based on personality traits such as lack of remorse, egocentricity, and shallow affect. Factor II, on the other hand, is based on the socially deviant lifestyle such as criminal versatility and past antisocial behavior (Lilienfeld, 1998). The PCL-R has been the primary diagnostic tool for psychopathy in recent decades and most of our knowledge and research stems from this measure (Hare, 2003).

Psychopathic Traits in Children

Johnstone and Cooke (2004) have addressed the importance of studying psychopathy in childhood by noting that the adult diagnosis stems, in part, from symptoms and traits first present in childhood, such as delinquent juvenile behavior. However, the implications for diagnosing psychopathy in childhood are potentially dangerous, and researchers prefer the term "psychopathic-like traits" (Johnstone & Cooke, 2004, p. 105). Psychopathic-like traits in children usually appear in the form of antisocial behaviors and conduct problems (Hare, 2003). Other psychopathic-like traits existing in childhood are behaviors such as manipulation, lack of remorse and empathy, impersonal sexual behavior, and early behavior problems (Forth et al., 2003). The presence of these behaviors can be a strong indication of psychopathy in adulthood. As an essential component of the adult diagnosis, psychopathic-like traits in childhood provide signs of future diagnosis and support the existence of the adult disorder. Therefore, identifying and studying psychopathy in children is important not only for the adult diagnosis and treatment, but the identification and examination of psychopathy in childhood also is imperative for possible early intervention and the prevention of further development of psychopathic traits in adulthood.

Longitudinal research (Gretton, Hare, & Catchpole, 2004) provides key insights regarding psychopathy and children and the long-term effects, and predicting psychopathic traits in adulthood. Gretton and colleagues conducted a 10-year

longitudinal study from adolescence to adulthood. Participants included adolescent boys who the court had mandated to receive a psychological assessment following a criminal conviction. These researchers found a higher score on the Psychopathy Checklist: Youth Version (PCL:YV) strongly predicted violent offending and earlier offending. Adolescents who possessed higher scores on the PCL:YV and psychopathic traits "continued to engage in high rates of nonviolent crime as they approached adulthood, but it was their long-term propensity for violence that distinguished them from other adolescent offenders" (Gretton et al., 2004, p. 642).

Because the construct of psychopathy in childhood and adolescence is not identical with that of adults, researchers and theorists cannot apply the construct to children in the same way it is with adults. The measurement of psychopathic-like traits in childhood has been a subject of great scrutiny, and researchers have developed many scales in an attempt to correctly identify the traits in childhood. It is crucial that the measure is accurate to diagnose and theoretically predict behavior. Frick, O'Brien, Wootton, and McBurnett (1994) first developed the Antisocial Process Screening Device (ASPD), which they later developed into the Psychopathy Screening Device (PSD) in an attempt to define and understand the construct of psychopathy in children. The PSD is now a widely used scale comprised of the same 20 traits of the PCL-R for adults. In terms of administration, the PSD is different than the PCL-R for adults because the PSD includes an interview and a rating scale that other significant individuals in the child's life, such as parents, complete (Frick et al., 1994). Two factors, Callous-Unemotional (CU) and Impulsivity/Conduct problems (I/CP) have been identified from the APSD and more recent research has identified a third factor, Narcissism. CU and I/CP closely resemble the two factors in adult psychopathy. I/CP in children is associated with delinquent behaviors, increased thrill seeking, lack of empathy and superficial charm (Frick et al., 1994). Barry et al. (2000) investigated the use of the CU scale in relation to conduct problems and ADHD in childhood. Children with high scores on the CU scale were more likely to exhibit conduct problems that relate to psychopathic traits in childhood. Children with high scores on the CU scale present more fearlessness and thrill-seeking behaviors, but demonstrate low levels of anxiety (Barry et al., 2000).

Subsequent research (Johnstone & Cooke, 2004) has shown that the ASPD is a strong measurement device for psychopathic-like traits in children, and parallels the construct of psychopathy in adults. The CU scale in particular accurately predicts outcomes similar to adult psychopathy. Researchers believe the traits identified by the CU scale are fundamental and longstanding in personality, which is a key part of development throughout an individual's lifetime. Similar to adult psychopathy and the PCL-R, theorists have proposed cutoff scores for the APSD, but they have not established a distinct cutoff score (Johnstone & Cooke, 2004).

Research (Forth et al., 2003) also supports the use of the PCL:YV as a diagnostic measure for psychopathic traits in childhood and adolescence. The PCL:YV is a measure based thematically on the PCL-R for adults and contains many of the same items. Similar items between the PCL-R and the PCL:YV include grandiosity, lack of remorse, and impulsivity. However, the PCL:YV omits items that may not be appropriate for children (i.e., short term marital relationships) and modifies others (i.e., juvenile delinquency). For instance, parasitic lifestyle remains on the PCL:YV as parasitic orientation, and includes tasks that are youth oriented, such as manipulating someone to do house chores, rather than occupational problems that occur in adulthood. Researchers administer the PCL:YV to children age 13 years and above and recommend a cut off score of 30 years, although they have not established a specific cut off (Forth et al., 2003).

Forth (1995) noted that psychopathic traits, as measured by the PCL:YV, are strong predictors of violence in adolescence. Children and adolescents who scored high on the PCL:YV were more likely to have engaged in antisocial behaviors earlier and more frequently (Forth, 1995). Similarly, psychopathic-like traits are correlated with conduct problems and aggression in children (Blair, Monson, & Frederickson, 2001). A bridge between adult psychopathy and child psychopathic-like traits is the existence of violence in childhood. Two criteria for the PCL-R are early behavioral problems and juvenile delinquency. The existence of behavioral problems and aggression in childhood are important predictors of future psychopathy and future violence (Hare, 2003). However, because a great deal of developmental change takes place during childhood and adolescence, the long-term accuracy of predictions is unclear. Also, it is important to note that adolescence is a time of considerable developmental change and that some risky behaviors are a part of typical age-appropriate development (Edens, Skeem, Cruise, & Cauffman, 2001).

The significant question regarding psychopathy is whether the construct could or should be extended to children. Personality begins to form early in life, and psychopathy is a disorder based on a maladaptive personality that could easily begin in childhood. However, as research has shown (Edens et al., 2001), personality development is not entirely stable throughout childhood. For example, adolescence is a time of extreme growth and change, yet often it is also marked by problematic behaviors. Adolescents who display these problematic behaviors may grow out of them with time (Forth, 1995). Although some theorists believe psychopathic-like traits are similar in adolescence and adulthood, many items on the PCL-R (i.e., short-term marital relationships) are not applicable to adolescents. Adolescents also show a greater increase in deviant behavior than other age groups, which makes the distinction between normal and abnormal behavior less clear (Edens et al., 2001). Even more significant is whether these traits, if found in adolescence, persist into adulthood. Even though the PCL:YV adjusts for these items, the changes create the possibility that the two measures may not be measuring the same construct.

Other developmental concerns arise in the application of psychopathic-like traits to children. For example, adolescents are in the middle of social and identity development. For adolescents, high scores on PCL items that pertain to a lack of long-term goals, grandiosity, and failure to accept responsibility, could be a function of normal development and not predictive of future personality and behavioral patterns. Edens et al. (2001) have shown that adolescents generally score higher on these same traits during this time period, and these traits tend to fade as the adolescent enters adulthood.

Moral Reasoning and Cognitive Development

Many researchers and theorists have described the development of moral reasoning, as well as the interaction between moral and cognitive development. Lawrence Kohlberg (1981) established much of the historical basis for moral development. Kohlberg theorized there were separate levels of morality. The preconventional level, including stages 1 and 2, usually lasts from birth to adolescence. Preconventional morality is based on a moral construct centered on reward, punishment, and self-gratification, despite societal norms and rules. The conventional level, stages 3 and 4, is associated with adolescents and young adults. Conventional morality demonstrates a change from being egocentric to an awareness of others, as well as an awareness of society's rules and laws. The highest level of Kohlberg's moral development is postconventional development, stages 5 and 6. According to Kohlberg, postconventional morality consists of the ability to reason abstractly, and in a personal way, about moral issues (Kohlberg, 1981).

Throughout the lifespan, cognitive development also is important in regard to moral reasoning. Jean Piaget (1952) established a theory of cognitive development composed of four stages. The sensorimotor stage, from birth to 2 years, focuses on children developing through the use of their senses and individual experiences. The preoperational stage in children aged 2 to 7 years consists of children starting to use language and reason symbolically. The concrete operational stage occurs when children are 7 to 11 years old; they begin to develop concrete thinking skills. Piaget's last stage of cognitive development is the formal operational stage, which starts at puberty. In this stage, children and adolescents develop the ability to reason abstractly and think critically.

Cognition and morality are interconnected, especially in childhood and adolescence. Researchers have correlated higher levels of cognitive functioning with higher levels of moral reasoning and prosocial behavior (Eisenberg, Miller, Shell, McNally, & Shea, 1991). Children have different levels of moral reasoning, as evidenced by Kohlberg's scale, associated with their respective levels of cognition. Therefore, the level at which a child is cognitively functioning becomes important when assessing a child's level of moral development because the two are significantly interconnected. The ability to think critically and reason abstractly are closely tied with a higher level of moral reasoning.

An important and well-researched facet of moral development is prosocial moral reasoning (Eisenberg et al., 1991). Eisenberg and colleagues define prosocial development as "reasoning about moral dilemmas in which one person's needs or desires conflict with those of another (or others) in a context in which the role of prohibitions, authorities' dictates, and formal obligations is minimal" (p. 849). Prosocial behavior is the result of a cognitive process by which moral reasoning is linked with morality. Additionally, prosocial behavior is the way moral reasoning is manifested in behavior and functioning (Eisenberg et al.). The role of prosocial behavior is significant for moral development throughout childhood and adolescence. Stages of prosocial development are somewhat consistent with Kohlberg's stages of morality. Young children tend to use "primitive, needs-oriented (primitive empathic) reasoning" (Eisenberg et al., 1991, p. 849) and elementary age children move toward forms of behavior based on societal approval. Researchers have found that direct reciprocity reasoning, or self-gain behavior, increases in elementary aged children but then in turn decreases in adolescence. In younger children, prosocial moral reasoning manifests in actual behaviors. In adolescence, moral reasoning is related to other-oriented concerns rather than self-gain as previously mentioned for younger childhood (Eisenberg et al., 1991). Researchers have also found that moral reasoning in children and adolescents also predicts prosocial behavior, or altruistic behavior (Maclean, Walker, & Matsuba, 2004). The level of moral reasoning, and corresponding altruistic behavior, demonstrated a more highly integrated sense of moral reasoning with identity. Identity integration, by way of prosocial behavior, in turn facilitates the internalization of morality (Maclean, et al., 2004).

Moral and cognitive development during childhood, adolescence, and throughout the lifespan is of particular relevance for understanding psychopathy and moral reasoning in children. An understanding of moral reasoning and prosocial behavior is necessary to build a framework of typical development in these areas. An important part of moral reasoning is developing a personal set of beliefs and morals people justify to themselves and others (Elliot & Gillett, 1992). In terms of cognitive development, for people to fully comprehend moral reasoning, they must develop a personal schema for how they understand morality. The development and interaction of morality and cognition demonstrate the potentially significant impact of psychopathic-like traits in the moral development of children.

Psychopathy and Moral Reasoning in Children

To many individuals within the clinical, forensic, and community settings, psychopaths appear to be without conscience (Hare, 1993). The previous review and discussion suggests that an abnormality in the moral reasoning of a child could be related to psychopathic tendencies. Deficits throughout the lifespan in areas of emotion and morality may be related to personality traits associated with psychopathy and suggest an influence on the developing disorder in chil-

dren. The literature (e.g., Blair, 1995) generally suggests deficits in the development of domains such as fear, empathy, and morality in psychopaths because they do not internalize morality in the same way as nonpsychopathic individuals.

Theorists have suggested various philosophical relations between the psychology and the philosophy of morality and psychopathy. Levenson (1995) suggested that one of the key aspects within psychopathy is a lack of conscience. Basic conscience is related to avoiding punishment, and is most closely related to the lowest stage in Kohlberg's theory of moral development, the preconventional stage (Levenson, 1995). In the preconventional stage, individuals understand morality in terms of reward, punishment, and self-gratification. Interestingly, a lack of conscience therefore would be associated with a corresponding lack of punishment avoidance, a prevalent characteristic of psychopathy (Levenson). Theoretically, if a lack of conscience is present during childhood, children would not sufficiently internalize the effects of punishment and would potentially remain in the preconventional stage of morality. Thus, it could be assumed that an inability to move forward to the subsequent stage of moral reasoning could be a significant factor in the appearance of psychopathic-like traits in children. The lack of punishment avoidance in psychopathy raises significant questions regarding the experience of emotion in psychopaths.

Fear and Punishment in Psychopathy

The role of emotion in psychopathy has been an important dimension, especially in relation to the development of moral reasoning. Emotional differences and deficits in psychopaths could have important implications for the development of moral reasoning. Steuerwald and Kosson (2000) described that during development, an individual is conditioned to know what is morally and socially acceptable through a number of avenues, one being fear and punishment. An individual is not well adjusted to feelings of tension and anxiety, and fear is accompanied by unpleasant physiological symptoms, such as increased heart rate and sweating. By nature, therefore, humans attempt to avoid fearful situations and the associated feelings (Steuerwald & Kosson, 2000). Research has investigated the emotional responses of psychopaths in comparison to nonpsychopaths, especially in the context of fear.

Research on the importance of fear suggests that a deficit in fear is related to morality. Additionally, Steuerwald and Kosson (2000) asserted that psychopathic individuals show less response to aversive stimuli and less startle reflex. Because psychopathic individuals seem to lack a normal response to fear, they lack the ability to be conditioned by, and learn from, fearful situations and the feelings associated with them. However, the differences in fear response are only found when a psychopath is forewarned about the aversive stimulus. Steuerwald and Kosson asserted that psychopaths experience fear and anxiety in the same way as nonpsycho-

paths, but possess a coping mechanism that allows them to better prepare for and deal with fear. Although a coping mechanism would not be considered a deficit, it demonstrates a divergence in the development of fear responses, and, in turn, the way fear shapes moral reasoning. The inability to learn morally acceptable behavior through responses to fear and punishment could be a significant hindrance on the moral reasoning of children with psychopathic-like traits.

The emotional experiences of children, especially children with psychopathic-like traits, are an important issue also. Blair and Coles (2000) examined emotional recognition and facial expressions in children. They also administered the PSD to children to assess behavior problems and psychopathic traits. Children with higher scores on the PSD and corresponding levels of behavior problems recognized less accurately expressions of fear and sadness. The experience and recognition of fear shows a clear link with experience of moral understanding. Therefore, one implication of these findings could be that children with psychopathic traits are theoretically less able to recognize fear and sadness in other individuals. If so, children with psychopathic traits would be similar to adults, as psychopathic adults exhibit different or lessened responses to fear. An extension of this finding, however, is that the children were less able to recognize sadness or fear in another individual's expression, suggesting a possibly deficiency in empathy (Blair & Coles, 2000).

Empathy and the Violence Inhibition Mechanism

An important aspect of moral reasoning throughout the lifespan is the development of empathy. Blair (1995) describes empathy as "an emotional reaction to a representation of the distressed internal state of another" (p. 4). Throughout moral development a person learns to associate another's distress with moral wrongdoing; eventually the person incorporates this sense of empathy as a key part of moral conscience. Empathy is also an important concept in the construct of psychopathy. In fact, the PCL-R items explicitly address lack of (Hare, 2003). The way in which empathy is not experienced similarly by psychopaths, or children with psychopathic-like traits, becomes an important aspect to examine.

An important cognitive mechanism in moral development, the Violence Inhibition Mechanism (VIM), is associated with aggression and inhibiting behavioral response. Blair (1997) has suggested that in a child with psychopathic-like traits, this mechanism could cause a lack of inhibition for aggression, and thus, lead to increased impulsivity. Blair (1995) proposed that humans possess a system, or cognitive framework, through which they perceive distress cues of other individuals. Individuals then recognize these distress cues, whether verbal or nonverbal, and withdraw from the behavior that presumably caused the observed distress cue from the other individual. The VIM, therefore, is critical for moral development, particularly in the development of moral emotions such as empathy and guilt. The VIM is crucial in the inhibition of violence and aggression, and during a nor-

mal childhood it provides a way to inhibit these actions. A child is conditioned, through distress cues when displaying aggressive and violent behavior, to not repeat the behavior because of the consequences these distress cues provide. A child without a VIM or with a deficiency in the VIM would not successfully be conditioned during development to recognize distress cues and inhibit aggression and would be more likely to have violent tendencies (Blair, 1995). Similarly, Blair et al. (2001) suggested that because the VIM is associated with inhibiting aggression, a deficit or deficiency in the mechanism would account for behavior problems and psychopathic-like traits in children.

In regard to moral reasoning, a deficiency in VIM could give substantial support for psychopathic tendencies not only in adults, but in children as well. A clear VIM deficit is displayed in adult psychopathy (Blair, 1995), and researchers have attempted to extend the findings to children. Blair et al. (2001) demonstrated that children with psychopathic traits exhibit either a deficit or a deficiency in the VIM functioning. Children with higher psychopathy scores, as measured by the PSD, were more likely to show more aggressive behaviors and conduct problems, suggesting a deficiency in the VIM. Blair (1999) examined skin conductance response to distress cues of children with psychopathic-like traits compared to children without psychopathic-like traits. Consistent with past research on adults, findings indicated that children with psychopathic-like traits demonstrated significantly lower skin conductance responses (SCRs) and were less responsive to distress cues, suggesting a lack of guilt and empathy. However, the findings also showed that children with psychopathic-like traits had appropriate responses to anger, signifying that they are able to accurately respond to some human emotions (Blair, 1999). The study also supported the theory of the VIM, and suggested that this mechanism may be deficient in children with psychopathic-like traits. The significance of these findings for the manifestation of psychopathic-like traits in children is critical, considering it gives support to the theory of a deficit in the experience of empathy. As empathy is a key component in moral reasoning, a deficiency in the VIM may have an effect on the child's development of psychopathic traits (Blair, 1999). The VIM is affected in other discerning tasks of morality, including the distinction of moral and conventional transgressions.

Conventional and Moral Transgressions

The distinction between and moral and conventional (social) transgressions is also an important component of moral reasoning in children. Turiel (1983) developed a model of morality subsequent researchers have used to explain moral development. Moral transgressions, such as hurting another individual or stealing property, are associated with the welfare and rights of others. Conventional transgressions are offenses against accepted social rules and norms, such as talking in class or breaking gender roles in terms of clothing (Blair et al., 2001; Turiel, 1983). A child's ability to recognize and distinguish between these two domains be-

comes an important part of moral development. An inability to make a distinction, therefore, would be abnormal.

A number of studies examined this distinction in moral development in children with psychopathic-like traits. Blair et al. (2001) assessed the moral/conventional distinction in children in relation to conduct problems. Sample moral scenarios for the project included, "a child hitting another child" and conventional scenarios included items such as "a boy wearing a skirt" (Blair et al., 2001, p. 802). The researchers then asked the children to justify whether the action in the scenario was wrong or not. Then, in a modified rule set, the researchers asked the children if the transgression would still be wrong if there was no explicit rule against it. Blair and colleagues demonstrated that children who scored higher on the PSD and had a higher number of related behavior problems performed more poorly on the modified question moral/conventional task. Children with higher scores on the PSD also were less likely to reference the welfare of others in their justifications for moral or conventional transgressions. The fact that children with psychopathic-like traits do not reference the welfare of others in their justifications supports a deficit in empathy in children. One implication of this study is that moral reasoning, as determined by the moral/conventional distinction task, is more impaired in children with behavior problems as measured by the PSD. Important to note, the difference between children who scored highly on the PSD scores and those who did not, existed only in the modified rule set, in which the children had to determine whether it would be wrong without an explicit rule. This finding is significant because children with psychopathic traits are less likely to apply a distinction based on learned rules to a moral reasoning scenario. Like findings on the VIM, children learn from moral and conventional transgressions often by how the welfare of others is affected or by observing another individual's distress. Similar to adults, children with psychopathic traits do not seem to recognize and learn from these distress cues and do not connect and integrate these experiences into their moral reasoning.

Taken together, the findings from previous literature (Blair, 1997, 1999; Blair et al., 2001; Steuerwald & Kosson, 2000) suggest a deficit in the moral reasoning of children with psychopathic-like traits. Similar to adult psychopaths, children with psychopathic-like traits can experience emotions such as fear and empathy, but exhibit key deficiencies in the way these emotions are manifested in their personalities. If the connection between emotions and moral reasoning is as strong as predicted in previous research, deficits in emotions such as empathy, guilt, and remorse would be critical in the development of moral reasoning in children with psychopathic traits (Elliott & Gillett, 1992). Similarly, although research has shown that psychopaths recognize the meaning of moral norms and understand that they are expected to follow them, the critical factor is that they fail to internalize this sense of moral understanding (Elliott & Gillett, 1992). Prosocial behavior in normal development, as previously discussed, is critical because it is the way indi-

viduals internalize their sense of morality and manifest that morality into behavior (Eisenberg et al., 1991). From my review of the literature, it seems psychopaths may not complete this process, and do not fully internalize morality in the sense that it may be reflected in their behavior. Psychopaths have a sense of moral understanding and the way it affects them personally, but they never fully internalize the meaning of morality and its application to their lives.

References

American Psychiatric Association (2000). *Diagnostic and statistical manual of mental disorders-IV-TR*. Washington DC: Author.

Barry, C. G., Frick, P. J., DeShazo, T. M., McCoy, M. G., Ellis, M., & Loney, B. R. (2000). The importance of callous-unemotional traits for extending the concept of psychopathy to children. *Journal of Abnormal Psychology, 109,* 335-340.

Blair, R. J. R. (1995). A cognitive developmental approach to morality: Investigating the psychopath. *Cognition, 57,* 1-29.

Blair, R. J. R. (1997). Moral reasoning and the child with psychopathic tendencies. *Personality & Individual Differences, 22,* 731-739.

Blair, R. J. R. (1999). Responsiveness to distress cues in the child with psychopathic tendencies. *Personality and Individual Differences, 27,* 135-145.

Blair, R. J. R., & Coles, M. (2000). Expression recognition and behavioral problems in early adolescence. *Cognitive Development, 15*, 421-434.

Blair, R. J. R., Monson, J., & Frederickson, N. (2001). Moral reasoning and conduct problems in children with emotional and behavioural difficulties. *Personality & Individual Differences, 31,* 799-811.

Cleckley, H. (1941).*The mask of sanity: An attempt to clarify some issues about the so-called psychopathic personality.* Oxford, England: C.V. Mosby.

Edens, J. F., Skeem, J. L., Cruise, K. R., & Cauffman, E. (2001). Assessment of "juvenile psychopathy" and its association with violence: A critical review. *Behavioral Sciences & the Law, 19*, 53-80.

Eisenberg, N., Miller, P. A., Shell, R., McNalley, S., & Shea, C. (1991). Prosocial development in adolescence: A longitudinal study. *Developmental Psychology, 27,* 849-857.

Elliott, C., & Gillett, G. (1992). Moral insanity and practical reason. *Philosophical Psychology, 5, 53-67.*

Forth, A. (1995). Psychopathy in adolescent offenders: Assessment, family background, and violence. *Issues in Criminological & Legal Psychology, 24,* 42-44.

Forth, A. E., Kosson, D. S., & Hare, R. D. (2003). *The Hare Psychopathy Checklist: Youth Version.* Toronto, Ontario, Canada: Multi-Health Systems.

Frick, P. J., O'Brien, B. S., Wootton, J. M., & McBurnett, K. (1994). Psychopathy and conduct problems in children. *Journal of Abnormal Psychology, 103,* 700-707.

Gretton, H. M., Hare, R. D., & Catchpole, R. E. H. (2004). Psychopathy and offending from adolescence to adulthood: A 10 year follow-up. *Journal of Consulting and Clinical Psychology, 72,* 636-645.

Hare, R. D. (1993). *Without Conscience: The disturbing world of the psychopaths among us.* New York: The Guilford Press.

Hare, R. D. (2003). *Hare Psychopathy Checklist-Revised (PCL-R):2nd Edition.* New York: Multi-Health Systems Inc.

Johnstone, L., & Cooke, D. (2004). Psychopathic-like traits in childhood: Conceptual and measurement concerns. *Behavioral Sciences & the Law, 22,* 103-125.

Kohlberg, L. (1981). *Essays on moral development.* San Francisco: Harper & Row.

Levenson, M. (1995). Psychopathy and conscience. *Issues in Criminological & Legal Psychology, 24,* 94-99.

Lilienfeld, S. O. (1998). Methodological advances and developments in the assessment of psychopathy. *Behavior Research & Therapy, 36,* 99-125.

Maclean, A. M., Walker, L. J., & Matsuba, M. K. (2004). Transcendence and the moral self: Identity integration, religion, and moral life. *Journal for the Scientific Study of Religion, 43,* 429-437.

Piaget, J. (1952). *The origins of intelligence in children.* New York: International Universities Press. (Original work published in 1936).

Steuerwald, B. L., & Kosson, D. S. (2000). Emotional experiences of the psychopath. In Gacono, C. B. (2000). *Clinical and forensic assessment of psychopathy: A practitioner's guide.* Lawrence Erlbaum Associates, Mahwah, NJ, 111-135.

Turiel, E. (1983). *The development of social knowledge: Morality and convention.* London: Cambridge University Press.

Cognitive Dissonance: The Individual's Groupthink

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This paper attempts to explain an individual's decision-making process in terms of the groupthink model introduced by Janis (1971, 1972, 1982). Because the forces underlying groupthink (i.e., the desire for maintaining harmony and reducing dissent of group members) directly parallel the forces underlying cognitive dissonance (i.e., the desire to maintain a positive, consistent self-perception and reduce dissonance), interesting relationships can be drawn. Research on individual decision-making and cognitive dissonance reduction are organized and analyzed according to Janis's eight symptoms of groupthink in order to find a new application for a generally held and widely accepted theory.

Festinger's (1957) theory of cognitive dissonance suggests that an individual will experience dissonance upon making a decision granted that the chosen alternative is not entirely the best and the rejected alternative is not entirely the worst. To better understand cognitive dissonance and create a hypothetical decision-making process, Gerard (1967) conducted a study that explored individual thought processes. After participants had ranked their preferences for paintings among a series of paintings, Gerard showed them larger projections of two of the paintings and told the participants that to compensate them for their participation in the study, they could choose to take one of the paintings. He gave some of the participants a difficult decision (i.e., choosing between the paintings they had originally ranked as third and fourth), and others an easy decision (i.e., choosing between paintings they had originally ranked third and eighth). Through his study, Gerard identified the following decision making process:

1. The participant is confronted with a decision.

2. He or she considers the advantages and disadvantages of each choice alternative. More time is spent focused on the alternative the participant does *not* end up choosing – likely because the participant is determining what will be lost when he or she does not choose that option.

3. The participant commits to one choice.

4. Immediately upon deciding, the participant experiences regret as he or she is confronted by the negative implications of his or her decision.

5. The participant justifies the decision made by focusing on positive implications of the choice rather than the negative ones.

Gerard's decision-making process, then, extends the process of making a decision to include an individual's cognitions after a choice has been made – those thoughts aimed toward reducing cognitive dissonance. He suggested that because of the physiological arousal associated with regret, an individual is motivated to reduce dissonance. In an elementary sense, Festinger's (1957, 1964) theory of cognitive dissonance states that to reduce tension from inconsistencies between behavior and attitude, one often justifies his or her action (choice) by changing the inconsistent attitude (regret).

Rosenfeld, Kennedy, and Giacalone (1986) demonstrated this process in a very practical way through a gumball guessing game conducted in a shopping mall. Participants were paid $10 to guess the number of gumballs in a 2-ft. cube in order to win $20,000. A confederate approached the participants before (pre-guess group) or after (post-guess group) they had made a guess. A control group of bystanders who were not participating in the game was also surveyed. All participants were asked to estimate the chance of guessing the right amount of gumballs on a scale from 1 to 100. Pre-guess and no-guess participants' responses did not vary significantly. However, the post-guess participants' responses were significantly different from the others: claiming a much higher chance of winning. These results indicated that individuals enhanced their decision to participate in the game after having participated. However, research conducted three years earlier, Rosenfeld, Giacalone, and Tedeschi (1983) asserted that it was nearly impossible to determine whether post-decision enhancement or pre-decision moderation was responsible for what is recognized as the post-decision dissonance phenomenon (i.e., rationalizing the chosen alternative as the best alternative). In other words, what appears to be rationalization after a decision has been made, may, in fact, be a part of the pre-decision process of weighing alternatives and modifying options that one believes are best before making that decision.

Many parallels can be drawn between this individual decision-making process and the steps followed by a group or team when coming to a decision; a process that has been described as groupthink. Groupthink was introduced by Irvin Janis (1971, 1972, 1982) and refers to the negative phenomenon that occurs when a desire to maintain group cohesiveness and harmony causes group members with dissenting viewpoints to remain silent – often with disastrous results. Janis studied a number of group decisions that led to negative outcomes such as the Bay of Pigs Invasion, Pearl Harbor, and various decisions made during the Korean and Vietnam wars. Janis argued that although one may be inclined to attribute these mistakes to stupidity, there is more involved because the members of the groups proved very intellectually talented by most measures. He believed that a more accurate explanation of these bad decisions could be identified in the group dynamics of a decision-making body. Janis called this phenomenon "groupthink" and defined it as "the deterioration in mental efficiency, reality testing, and moral judgment as a result of group pressure" (1971, p. 43). His theory introduces what he refers to as eight symptoms of group think:

(a) invulnerability, (b) rationale, (c) morality, (d) stereotypes, (e) pressure, (f) self-censorship, (g) unanimity, and (h) mindguards.

These eight symptoms, originally introduced in a group context, provide an interesting formulation by which to analyze an individual's thought processes as well. The first symptom of groupthink is the "illusion of invulnerability." In its original application to group decision-making, this symptom suggested that when gathered together, groups underestimate their vulnerability to negative influences. This phenomenon can be seen in an individual's processing as well. For example, McKenna, Warburton, and Winwood (1993) observed that individual smokers rate themselves as less vulnerable to smoking-related risks than the average smoker. In their study, 60 smokers and 60 non-smokers were given a "Future Life Events Questionnaire" that asked each participant to make a judgment on the likelihood of different events happening to (a) themselves, (b) the average smoker, and (c) the average non-smoker. The events were categorized as either (a) smoking-associated, (b) health related, or (c) non-health related. The illusion of invulnerability was clearly present in the finding that smokers considered themselves less likely to develop smoking related diseases than the average-smoker. This finding of unrealistic optimism in one's invulnerability among individuals at risk has been demonstrated in several areas including smokers getting cancer, (Dillard, McCaul, & Klein, 2006), and risky drivers being involved in an automobile accident (McKenna & Horswill, 2006).

The second symptom in Janis's theory of groupthink (1971, 1972, 1982) is "rationale." Evidence suggesting that groups justify their decisions is readily available including a recent study by Kaiser, Dyrenforth and Hagiwara (2006) on rationalizing racism as well as the work by Jost and Hunyady (2006) that indicated both dispositional and situational factors play a role in rationalization.

Rationalization manifests itself in our personal lives every time we justify an action by changing our attitude. Ueichi and Kusumi (2004) demonstrated that individuals who indicated they used rationalization as an active coping method were able to significantly decrease their feelings of regret over time. Using rationalization to decrease feelings of regret can be an almost immediate and unconscious reaction, as shown in studies of post-decision regret, like the one conducted by Walster (1964) and those published in Festinger's (1964) book *Conflict, Decision, and Dissonance*. Postdecision regret is manifested when, after making a decision, one temporarily views the alternative he or she did not choose as the one he or she should have chosen.

Walster (1964) created a situation that should have had a relatively long-lasting regret phase and in which dissonance reduction would be difficult because it would affect at least the next two years of the participant's life. She had army recruits answer questions about their satisfaction with their job assignment before and after ranking a number of job op-

portunities. She measured participants' regret and dissonance reduction at various time intervals after a decision had been made and found that post-decision regret did indeed exist and that it surfaced almost immediately. Although evidence of dissonance reduction seemed to disappear entirely after 90 min had elapsed (a result she could not fully explain), it was very clear that dissonance reduction had taken place sometime between 4 and 15 min after the decision was made. This immediate dissonance reduction takes place because of an individual's desire to rationalize his or her decision and make it seem better – exactly as Janis proposed groups do in making a decision.

The third symptom of groupthink that Janis (1971, 1972, 1982) identified was an illusion of the group's "morality." In its original context, the illusion of morality surfaced when members of a group trusted the inherent morality of their ingroup, and, therefore, ignored the ethical consequences of their actions. This symptom can also be seen on an individual level in one's assumption of his or her inherent morality: the perspective that one's own way is the best way. Alicke's (1993) research on egocentric standards of conduct evaluation provides a clear picture of the way one's moral decisions are moderated by an attempt to maintain a positive identity and self-perception. Alicke introduced participants to ethical decision conflicts of questionable morality. Each vignette explained an individual's situation and the way that he or she dealt with it. When evaluating choice alternatives, it was often clear that what a participant found to be the ideal choice was not the one that he or she would have chosen in the actual situation. The participant rationalized his or her less-ethical choice by making it seem like a better option. The choice alternatives were moderated by the participant's self-perception of his or her own morality.

The effect of one's self-evaluation on subsequent decision can also be observed when the desire to maintain a positive and consistent self-concept motivates one to reduce postdecision dissonance that seems inconsistent with his or her attitudes or moral standards. In a study of moral/non-moral behavior in young adolescents, Leenders and Brugman (2005) found that because one's image is at greater risk concerning moral behavior decisions than those behavior decisions unrelated to morality, one will reduce dissonance by considering a decision made to have less moral connotation than originally perceived. In this way, one insulates and protects his or her self-perception and identity and, in doing so, builds an illusion of his or her own honorable morality.

"Stereotypes" were identified as the fourth symptom of groupthink. Janis (1971, 1972, 1982) suggested that in a group context, members were likely to stereotype out-group members. Several examples of this process can be found in LeVine and Campbell's (1972) book *Ethnocentrism: Theories of Conflict, Ethnic Attitudes, and Group Behavior.* This concept can be seen on an individual level when individuals stereotype certain decision alternatives. Taylor and Gollwitzer's (1995) study on mindset manipulations demonstrated

that when individuals moved from a deliberative mindset to an implemental mindset they developed a significant bias toward their decision or goal. Just as a group tends to have a bias for in-group members and thereby stereotype out-group members as less capable or effective, an individual's mindset causes him or her to have a bias for certain alternatives and a negative stereotypical view of others. When weighing the advantages and disadvantages of various choice alternatives, one might not give each alternative appropriate consideration because he or she views certain alternatives in pronounced and rigid ways – immediately discounting them as inferior. Just as with stereotypes of other people, stereotypes about certain alternative viewpoints can result in self-fulfilling prophecies.

The fifth symptom of groupthink is "pressure." More specifically, Janis (1971, 1972, 1982) was referring to those pressures felt within a group toward consensus that cause individuals to ignore any misgivings they may have and thereby eliminate dissension. When referring to the individual, Festinger states that "the presence of dissonance gives rise to pressures to reduce or eliminate the dissonance" (1957, p. 18). Uncomfortable physiological indicators of stress and pressure signal and motivate groups and individuals alike to reduce the dissonance or dissension. In a person's attempt to reach one unified decision, he or she often discounts the validity of one of the alternatives or refuses information that would help him or her make a more informed decision because of the personal pressure to make a timely decision. This phenomenon can be seen in Whiteley and Watts' (1969) study of pre-decision information seeking in light of costs. The participants in this study declined the opportunity to make a more-informed decision and instead forced themselves to reach a hasty conclusion to eliminate the stress associated with the decision-making process. Similarly, Wai-Tat & Gray (2006) found that individuals limit their information-seeking efforts due to associated costs and therefore performed at suboptimal levels. The stress and anxiety an individual experiences due to the inner turmoil and pressure involved in reaching a decision is comparable to the uncomfortable dissension and pressure faced by a group deliberating over a decision.

"Self-censorship" is the sixth of Janis's (1971, 1972, 1982) symptoms of groupthink and can be observed in an individuals' selective exposure to information. An individual will generally seek out information that supports his or her beliefs and avoid incompatible information. This principle of selective exposure was illustrated in Brock's (1965) study by comparing 82 smokers' reading preferences to 90 nonsmokers' reading preferences. Brock administered a survey to college students asking them to rank a list of 13 article titles according to their interest in the topic. Some of the articles supported a link between cancer and smoking, whereas others denied such a link. Brock manipulated the instructions of the survey slightly so that some of the participants believed they would have immediate exposure to the articles they chose, whereas others did not necessarily expect to be ex-

posed to the full articles. In either case, the smoking participants preferred articles suggesting no link between smoking and cancer more than did the nonsmoking participants. Clarke and James (1967) took this concept further to suggest that the anticipated use for information affects an individual's selective exposure to it. In their study, three groups of participants received a number of articles that represented both sides of a controversial topic. The first group of participants received the articles by mail for personal interest. The second group expected to engage in a discussion group following their reading. The third group expected to debate their opinion following their exposure. When participants expected to have to defend their opinions, they read articles in support of their view and avoided discrepant articles to a much greater degree than did those participants who were reading out of private interest. This finding suggests that when we intend to justify a behavior or belief, we tend to censor the information we expose ourselves to – just as Janis (1971, 1972, 1982) indicated that a group might do.

The seventh symptoms of groupthink is "unanimity," and occurs when a group's desire to be unified in a decision overrides its desire to make the absolute best decision (Janis, 1971, 1972, 1982) and has been shown to include both vertical solidarity (e.g., workers and their leader) as well as horizontal solidarity between co-workers (Sanders & Schyns, 2006). An individual also ignores thoughts or attitudes that are not consistent with his or her identity so that he or she might maintain a comprehensive, "unanimous" sense of self. This concept is basic to the theory of cognitive dissonance and is illustrated well in a study by Gerard (1964). In this study, 56 high school students who were enrolled in art courses were the participants of a study they believed tested their artistic abilities. Gerard conducted the study in two sessions. During the first session, he presented the participants with two or three designs and asked them to choose which they found to be the most aesthetically pleasing. Within the next three weeks, Gerard scheduled each participant for an individual 40-min session in which he or she ranked a series of 15 pictures and then was asked to make decisions between two of them. Decision difficulty was varied by having the difficult choice made between the fourth and sixth ranked painting and the easier decision made between the fourth and twelfth ranked paintings. The perceived importance of the decision was also varied by telling some students they were making a choice of which print they would be given, and others that they were simply informing the experimenter of their preference. The final variable was that of self-evaluation. Students were shown false test results that categorized them according to their artistic ability. Some students were told they were high-ability artists, some that they were average artists, and some that they were low-ability artists. Results showed that if participants were told they were in the top 10th percentile, they rated themselves above average in the self-ability estimate. Therefore, the decision outcome and performance evaluations were consistent with performance expectations. In this way, each participant was able to maintain a consistent and coherent self-concept (i.e.,

creating "unanimity" of his or her identity). McMillan (2005) suggested that this coherence of self is certainly desirable as it may help to produce higher self-esteem, stability, and confidence.

The final symptom in Janis's (1971, 1972, 1982) theory of groupthink is the presence of self-appointed "mind-guards" whose role is to insulate the group from negative information. A good example of this process is illustrated by the behavior of British citizens during the conflict in Northern Ireland (Hergovich & Olbrich, 2003). Human brains can also build up mind-guards in many situations. Consider, for example, Anderson, Lepper, and Ross' (1980) study on theory perseverance. In their first experiment, participants were led to believe that either risk-taking or conservative behavior was indicative of a good fire fighter. Two-thirds of the participants then went through a debriefing manipulation in which they were told that the case study they had read was fictitious and the true relationship between risk-taking behavior and skill as a fire fighter was not known. The participants were assessed in a variety of ways regarding their opinion of the relationship between risk-taking and fire fighting. Regardless of how they had been debriefed, participants who were originally exposed to information suggesting a positive relationship existed continued to believe a positive relationship existed. Likewise, participants who were originally exposed to information suggesting a negative relationship existed continued to believe a negative relationship existed.

Anderson et al. (1980) conducted a second experiment that demonstrated that the initial exposure participants had to one position would powerfully affect their later belief even if the point was completely refuted following the original exposure. The participants had constructed mind-guards around the original information and were persistent in their belief regardless of any contrary information they were given. Similarly, Miller (1977) found that students create mind-guards through selective exposure to information contrary to their chosen alternative in a study of volunteerism.

Multiple studies of cognitive dissonance and individual decision-making processes show a clear parallel to the group decision-making processes defined by Janis's theory of groupthink (1971, 1972, 1982). Using theories of group dynamics to analyze individual decision-making processes can bring us to a greater understanding of the how the individual functions, and vice-versa. In many ways, there is little difference between the process by which an individual reaches a decision and the process by which a group reaches a consensus on a group decision-making task. Both individuals and groups get frustrated and experience the associated physiological arousal. Dissonance within in an individual is uncomfortable, just as disagreements within a group. Imagine a conference that takes place within an individual's head: Cognitively dissonant thoughts in his or her mind are like different members of a group experiencing conflict. One idea is introduced, but then contradicted by another dissonant thought. Also, just as a group will try to reduce such conflict and come to a consensus, an individual tries to reduce the

dissonance and come to one agreed upon conclusion. Just as a group may verbally negotiate an issue at hand, a person negotiates with him or herself to reach a personal decision. And finally, just as one group member may try to persuade others to take his or her stance on a particular matter, an individual can moderate one alternative to convince him or herself that such a viewpoint is superior to another.

The concept of separating the mind into distinct entities is not new. For example, it is fairly easy to visualize the image of a devil and an angel sitting on opposite shoulders debating a moral decision. This picture has often been used in cinematography and other visual arts to depict an individual's decision-making process in a tangible way. In fact, when making a difficult decision individuals may experience an internal discussion wherein they "argued with themselves," or take opposing view points to work through a difficult decision while playing their own personal "devil's advocate." This process of comparing opposite viewpoints and synthesizing facts within one's head is known as dialectical thinking (see Ruisel, 2006). The philosophy of dialectical thinking as opposed to Aristotelian logic has been around for thousands of years in many cultures (Peng & Nisbett, 1999; Wong, 2006). Furthermore, research supports the occurrence of dialectical thinking (e.g., Kahle, Lui, Rose, & Kim, 2000; Silvia, 2001; Wicklund, 1970). Although dialectical thinking is certainly applicable in decision making, Kahle et al. (2000) suggest that the concept has been wrongly deemphasized in the discipline of psychology.

When trying to understand cognitive dissonance and other psychological processes of individuals, the cognitive ability people have to take multiple perspectives should not be ignored. Instead, theories of group dynamics should be utilized to find new and interesting contributions to our understanding of the individual decision-making process. Group decision-making and individual decision-making are often viewed as entirely different processes, when in reality they overlap greatly. Information and understanding gained in one area can greatly enhance understanding of the other. Further research would help to strengthen the link between the symptoms of groupthink and an individual's cognitive processing. For example, the illusion of invulnerability is seen on an individual level in a smokers' unrealistic optimism, but additional research on how this concept applies specifically to the cognitive dissonance reduction process would be useful. Likewise, further research on how one forms and holds rigid views toward concepts and ideas the same way he or she does toward people would help confirm the link between out-group stereotyping and individual decision-making processes. In general, empirical investigation of any one of the individual cognitive processes presented evaluated in light of the groupthink model would help to strengthen the link between these two conceptualizations. Empirical research on the role of physiological arousal in cases of groupthink and cognitive dissonance would also be useful in understanding this link between group and individual processes. Of course, it should not be denied that distinct differences between a

group and an individual do exist. In group decision-making situations, there can be multiple "conferences" taking place within the members' heads as well as the physical conference that is taking place among the group members, adding a variable of complexity to the group decision-making process. Also, although a group consensus and an individual decision are very comparable, groupthink and dissonance reduction are not so simply synonymous. Groupthink is the negative form of group synergy that groups should seek to avoid. Group synergy is the positive or negative affect that the formation of a group has on the outcome and proceedings of its task based on the Gestalt view that the whole is not just the sum of its parts. Dissonance reduction, like group synergy, can produce both positive and negative outcomes. Still, a model of group dynamics provides a useful tool to better understand the inner workings of the complex human mind when making a difficult decision

References

Alicke, M. D. (1993). Egocentric standards of conduct evaluation. *Basic and Applied Social Psychology, 14,* 171-192.

Anderson, C. A., Lepper, M. R., & Ross, L. (1980). Perseverance of social theories: The role of explanation in the persistence of discredited information. *Journal of Personality and Social Psychology, 39,* 1037-1049.

Brock, T. (1965). Commitment to exposure as a determinant of information receptivity. *Journal of Personality and Social Psychology, 2,* 10-19.

Clarke, P. U., & James, J. (1967). The effects of situation, attitude intensity and personality on information-seeking. *Sociometry, 30,* 235-245.

Dillard, A. J., McCaul, K. D., & Klein, W. M. P. (2006). Unrealistic optimism in smokers: Implications for smoking myth endorsements and self-protective motivation. *Journal of Health Communication, 11,* 93-102.

Festinger, L. (1957). *A theory of cognitive dissonance.* Stanford, CA: Stanford University Press.

Festinger, L. (1964). *Conflict, decision and dissonance.* Stanford, CA: Stanford University Press.

Gerard, H. B. (1964). Self-evaluation and the evaluation of choice alternatives. *Journal of Personality, 32,* 395-411.

Gerard, H. B. (1967). Choice difficulty, dissonance, and the decision sequence. *Journal of Personality, 35,* 91-109.

Hergovich, A., & Olbrich, A. (2003). The impact of the Northern Ireland conflict on social identity, groupthink and integrative complexity in Great Britain. *Review of Psychology, 10,* 95-106.

Janis, I. L. (1971). Groupthink. *Psychology Today, 5,* 43-46, 74-76.

Janis, I. L. (1972) *Victims of groupthink.* Boston: Houghton-Mifflin.

Janis, I. L. (1982) *Groupthink.* Boston: Houghton-Mifflin.

Jost, J. T., & Hunyady, O. (2006). Antecedents and consequences of system-justifying ideologies. *Current Directions in Psychological Sciences, 14,* 260-265.

Kahle, L. R., Lui, R. R., Rose, G. M., & Kim, W. (2000). Dialectical thinking in consumer decision making. *Journal of Consumer Psychology, 9,* 53-58.

Kaiser, C. R., Dyrenforth, P. S., & Hagiwara, N. (2006). Why are attributions to discrimination interpersonally costly? A test of system- and group-justifying motivations. *Personality and Social Psychology Bulletin, 32,* 1523-1536.

Leenders, I. & Brugman, D. (2005). Moral/non-moral domain shift in young adolescents in relation to delinquent behavior. *British Journal of Developmental Psychology, 23,* 65-79.

LeVine, R. A., & Campbell, D. T. (1972). *Ethnocentrism: Theories of conflict, ethnic attitudes, and group behavior.* New York: Wiley.

McKenna, F. P., & Horswill, M. S. (2006). Risk-taking from the participant's perspective: The case of driving and accident risk. *Health Psychology, 25,* 163-170.

McKenna, F. P., Warburton, D. M., & Winwood, M. (1993). Exploring the limits of optimism: The case of smokers' decision making. *British Journal of Psychology, 84,* 389-394.

McMillan, K. K. (2005), Coherence versus fragmentation in the self-system: Implications for self-evaluation and social behavior. *Dissertation Abstracts International: Section B: The Sciences and Engineering, 66,* 1222.

Miller, R. L. (1977). The effects of postdecisional regret on selective exposure. *European Journal of Social Psychology, 7,* 121-127.

Peng, K., & Nisbett, R. E. (1999). Culture, dialectics, and reasoning about contradiction. *American Psychologist, 54,* 741-754.

Rosenfeld, P., Kennedy, J. G., & Giacalone, R. A. (1986). Decision-making; A demonstration of the postdecision dissonance effect. *Journal of Social Psychology, 126,* 663-665.

Rosenfeld, P., Giacalone, R. A., & Tedeschi, J. T. (1983). Cognitive dissonance vs. impression management. *Journal of Social Psychology, 120,* 203-211.

Ruisel, I. (2006). About the effect of rational, dialectical and critical thinking on wisdom. *Studia Psychologica, 48,* 81-94.

Sanders, K. & Schyns, B. (2006). Leadership and solidarity behaviour: Consensus in perception of employees within teams. *Personnel Review, 35,* 538-556.

Silvia, P. J. (2001). Nothing of the opposite: Intersecting terror management and objective self-awareness. *European Journal of Personality, 15,* 73-82.

Taylor, S. E., & Gollwitzer, P. M. (1995). Effects of mindset on positive illusions. *Journal of Personality and Social Psychology, 69,* 213-226.

Ueichi, H., & Kusumi, T. (2004). Change in feelings of regret over time: Relation to decision-making style, behavior, and coping methods. *Japanese Journal of Psychology, 74,* 487-495.

Wai-Tat, F., & Gray, W. D. (2006). Suboptimal tradeoffs in information seeking. *Cognitive Psychology, 52,* 195-242.

Walster, E. (1964). The temporal sequence of post-decision processes. In L. Festinger (Ed.), *Conflict, decision, and dissonance* (pp. 112-127). Stanford, CA: Stanford University Press.

Whitely, R. H., & Watts, W. A. (1969). Information cost, decision consequence, and selected personality variables as factors in predecision information seeking. *Journal of Personality, 37,* 325-343.

Wicklund, R. A. (1970). Prechoice preference reversal as a result of threat to decision freedom. *Journal of Personality and Social Psychology, 14,* 8-17.

Wong, W. (2006). Understanding dialectical thinking from a cultural-historic perspective. *Philosophical Psychology, 19,* 239-260.

Notes:

Dr. Phil Phenomenon: Personality Assessment and the Barnum Effect

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In a study of 246 participants from a small private Liberal Arts college, participants rated the extent to which they accepted generalized personality descriptions dependent upon whether they were told the test was designed by Dr. Phil McGraw (true) or a gifted high school student (false). It was hypothesized that participants given the "Dr. Phil" personality test would rate themselves more like the yielded results of the test because of Dr. Phil's popularity in the media. Results indicated participants were significantly more likely to believe the results when they thought Dr. Phil authored the test. Findings are discussed in terms of the Barnum Effect because the Dr. Phil test only offers vague generalized descriptions of personality.

Can an individual accurately rate him/herself with regard to the judgment of the self? Do generic personality tests give insight into the self? When individuals fall victim to the Barnum Effect, vague and general personality descriptions are seen as applicable to themselves without realizing that the same random description could be applied to just about anyone, anywhere. Johnson, Cain, Falke, Hayman, and Perillo (1985) describe the Barnum Effect as "a phenomenon in which individuals believe that certain high base rate personality profiles were prepared specifically for them and usually rate the profiles as extremely accurate descriptions of themselves" (p. 15). Falling victim to the Barnum Effect, some individuals in their study even rated generalized descriptions as being more applicable to themselves than to the general public. Participants were therefore seen as "gullible" because they believed the descriptions were unique to them, failing to realize that they applied equally well to others. Hope, wishful thinking, and a desire to make sense of one's experiences are the most common explanations given to explain the Barnum Effect. In other words, because of our innate desire to make sense of the world, we fall victim to believing a generalized description provided by a simple personality quiz, regardless of how accurate the quiz or resulting description is of us. Similarly, Carroll (2005) noted that people accept generalized claims about themselves in proportion to their desire for the claims be true, rather than in proportion to the empirical accuracy of the claims as measured by statistics.

Generalized personality descriptions are vague and readily accepted as applicable to many people; previous research has demonstrated this phenomenon. For example, Layne (1978) administered the Minnesota Multiphasic Personality Inventory Correction Scale (MMPI-K) and one form of the Environmental Performance Indicator (EPI-N) to students. A rating scale of one through five was used (1 = *accurate*, 5 = *inaccurate*). Participants who thought their tests were scored by clinical psychologists rated the findings of their personalities as more accurate. The control group who did not believe their tests were scored by a clinical psychologist, found more inaccuracies in the personality assessment than did the experimental group. Therefore, having an expert, such as a clinical psychologist, identified as test-scorer made a vast difference in how participants evaluated their personality reports. Participants accepted the vague and generalized personality descriptions as applicable to themselves without realizing that the same generalized description could be applied to most all who took the test, another example of the Barnum Effect.

The Barnum Effect is no laughing matter; there can be serious positive and negative consequences to a person's self-confidence and self-efficacy if they are tricked into believing generalized personality assessments. In a study conducted by Ludwig, Franco, and Behm (2000), many employees of a large manufacturing company participated in a hand written test based on one question, "What kind of employee does (company's name left out) want working here?" The employees took a brief personality test that was generalized so that everyone would score favorably on the test. Three weeks after the test was given, a survey was sent home with the employees to complete. The employees reported on a scale of 1 to 7 (1 = *low* and 7 = *high*) how much the test helped them learn who they were and if it made them a better worker for the company. Ludwig and his colleagues were amazed at the results. Out of 1,845 participants only 67 said the personality test results did not influence their understanding of who they were as a person or their style of workmanship. The team of researchers was perhaps viewed as having expertise, and thus their generalized personality test was widely accepted by employees, and in turn helped the company bring positive regard back into the factory workers' lives.

The Barnum Effect has shown that high base-rate feedback from an expert, coupled with the belief that the feedback was prepared specifically for the self, is especially powerful (Dickson & Kelly, 1985). That is, when a questionnaire or a test is presented by a person of stature, people are more likely to accept the terms and results associated with the test. Individuals are likely to accept the positive descriptions given by the "expert" as applications of their life, whereas negative descriptions are often seen as a reflection of a poor rating system rather than the description lacking believability. Dr. Phil McGraw is one such "expert" that is said to be taking the nation by storm (Cottle, 2004). Dr. Phil is a popular clinical psychologist who has a daytime talk show and is referred to by many because of his advice on topics that plague the common household. His name has become part of laymen's vocabulary; Dr. Phil has numerous self-help books, self-help foods, vitamins, videos, and tapes. In other words, the term "self-help" is applied to numerous things Dr. Phil has done or aspires to do. However, there is some question as to whether Dr. Phil is able to accurately assess every personality watching or listening to him, and whether he can change viewers' lives or offer genuine help.

Talk shows have become a popular form of media for over 6.6 million viewers in part because of the increased emphasis on providing some type of therapeutic help or outlet to guests and/or viewers (Ventura, 2005). Approximately one in five Americans now suffer from a diagnosable mental disorder. The National Institute of Mental Health estimates that more than 13% of Americans (i.e., over 19 million people) between the ages of 18 and 54 years suffer from anxiety disorders, 9.5% from depressive disorders and millions of others from conditions ranging from post-traumatic stress disorder to schizophrenia and bipolar disorder (Cottle, 2004). In addition, in 2001, 5.5 million more Americans were taking prescription drugs for mental health problems, or problems of substance abuse, than was the case only five years earlier (Ventura, 2005). Because of these dramatic increases in the mental health cases, the obvious need for counseling or therapy has been a nationwide movement. Psychotherapy, along with open communication, has been incorporated into many households in America. Historically, individuals have been ashamed to self disclose personal problems, but through research and practice, we have discovered that disclosure offers several benefits. The goals of many therapists include developing and refining new ways of helping clients deal with a traumatic past or present lifestyle (Chin, 2006).

Enter Dr. Phil McGraw into the picture. Dr. Phil can be viewed Monday through Friday on national television. Dr. Phil is in "your" room, and reactions are welcomed; he confronts victimhood with what has become his signature phrase, a challenging injunction spoken with earnest concern: "Get real" (Cottle, 2004). Many Americans face the reality of depression, divorce, grief, and many other challenges that cause them to gravitate to a figure who claims to bring relief. Many viewers agree that Dr. Phil McGraw holds the ability to help reform the nation. "No man since Walter Cronkite has commanded the television medium with such seemingly effortless intimacy" (Ventura, 2005, p. 80).

In 2004, Dr. Phil was a guest on the Oprah Winfrey Show as a clinical psychologist; he had a surprisingly "accurate" personality test to give to Oprah. The test consisted of 10 questions and was designed for self-scoring. Oprah felt her personality was described by the results and thus endorsed the test. However, many critics have questioned Dr. Phil's use and publishing of this test in his self-help books (Chin, 2006). The test claims to help people in the present and not in the past, and to help them gain better insight into who they are. Therapy is serious work, but Dr. Phil is entertainment at the click of a remote. His efforts to help may have some grounding in his psychological background, but the question remains as to whether his efforts really help or cause more confusion.

This "Dr. Phil Phenomenon" not only involves Dr. Phil as an actual psychologist but also the personality of Dr. Phil. Dr. Phil is able to persuade his audiences to believe the results of his personality test, even though the test is generalized and not experimentally validated, thus producing the Barnum Effect. To investigate the power of the "Dr. Phil Phenomenon" and Barnum Effect induced by his personality test for the present study, I hypothesized that the participants given the "Dr. Phil" personality test (labeled such as) would rate themselves more like the descriptive results than participants who took the same test that was labeled (falsely) to have been created by a gifted high school student.

Method

Participants

The experimenter obtained a total of 246 (123 women, 123 men) volunteer participants. The age range was from 17 to 57 years, ($M = 23.4$), the majority of participants were college-aged students with some faculty and staff as volunteers. A sign-up sheet was posted in a central and standard location for research and students were offered extra credit in their Psychology courses. The experimenter also used convenience sampling to gain additional participants. All participants were treated in accordance with the "Ethical Principles of Psychologists and Code of Conduct" (American Psychological Associations, 2002).

Materials

In addition to a simple demographic form, participants completed the Dr. Phil personality test (McGraw, 2001). The demographic form asked additional questions to help the researcher better understand potential belief in other assessments that could lead to the Barnum Effect (e.g., horoscopes, palm readings, zodiac signs, and psychic readings). Additionally, participants were asked if they watched the Dr. Phil or other talk shows, and whether or not they thought talk shows were helpful to the general public.

Two versions of the Dr. Phil personality test were used: one labeled as developed by Dr. Phil, the other labeled as developed by a gifted high school student. The test has 10 questions and is self-scored. On the back of the Dr. Phil Personality Test there was an additional section to assess information pertaining to the participants' insights on personality. The test was located on Dr. Phil McGraw's website (i.e., http://www.drphil.com/). There were no statistics available to indicate the reliability or validity of this test.

The exact wording used for the gifted high school student test (false) was: "This test was developed by a high school student who is mentally gifted. Many people have said this test is accurate and relates well to their lives." For the Dr. Phil test (true) the wording consisted of: "This test was developed by Dr. Phil McGraw. Many people have said this test is accurate and related well to their lives, including Oprah." Additional materials such as pens and pencils were also provided.

Design and Procedure

The majority of the participants were tested in a normal classroom setting, whereas others were individually tested in

research cubicles. Participants were welcomed to the experiment and randomly assigned to one of the two conditions, (i.e., Dr. Phil's Personality Test or the fictitious mentally gifted high school student's test). Each participant was allowed, but not mandated to sign an informed consent.

Participants were informed the study was designed to examine the participants' personalities (Personality Assessment Test) and all sides of the test should be completed. The experimenter (in classroom setting) handed the tests out to each individual. After everyone completed the test, the experimenter collected the forms, debriefed, and thanked the class. When the tests were proctored individually, the experimenter told the individual that the test was designed to examine a Personality Assessment. Upon completion, participants were given the opportunity to ask questions, and then were thanked for their time. Participants were given a more thorough debriefing via e-mail.

Results

To examine the interconnectedness of demographic questions exploratory correlational analyses were utilized. These analyses indicated that participants' sex was correlated with watching the Dr. Phil talk show, $r(246) = .138$, $p = .030$ (women – 62.9% watching more than men – 32.7%), and also with how helpful the Dr. Phil show is, $r(246) = .162$, $p = .011$ (women – 60.4% seeing Dr. Phil as more helpful than men – 44.2%). Regarding additional demographic questions, belief in the afterlife was the most common for participants (93.1%), followed by belief in ghosts (31.3%) and then palm readings (26%), which was followed closely by belief in horoscopes (24.4%).

Participants were also asked if they watched talk shows other than the Dr. Phil show. Many participants who watched the Dr. Phil show also watched other talk shows (61.9%). Also, when the experimenter sent out the debriefing notices via e-mail, one participant wrote back saying how his personality description had "changed his way of thinking." He had always thought he was a pessimist and now believes in a half full glass instead of half empty glass; the high school genius affected his life.

To examine the main hypothesis and further investigate sex differences found in exploratory analyses a 2 (version of the personality test: Dr. Phil vs. fictitious high school student) x 2 (sex of participant) was utilized on participants' ratings of how descriptive they viewed the personality test on a five point scale (1 = *not like me* to 5 = *very much like me*). Results revealed no significant main effect of participants' sex, $F(1, 242) = .133$, p > .05, a significant main effect of the experimental manipulation $F(1, 242) = 3.94$, $p = .048$, and no significant interaction $F(1, 242) = .071$, p > .05. Thus, the identified "Dr. Phil" test was rated as more descriptive ($M = 4.07$) than the fictitious high school student test ($M = 3.85$).

Discussion

The purpose of the present study was to examine whether individuals would accept generalized personality descriptions dependent upon whether they were told the test was designed by Dr. Phil McGraw (true) or a gifted high school student (false). I hypothesized that participants given the "Dr. Phil" personality test (labeled as such) would rate themselves more like the descriptive results than participants who took the same test that was labeled (falsely) to have been created by a gifted high school student. The data for the experiment supported the hypothesis. Dr. Phil's test (labeled as such) was rated "more like me" by participants than was the test labeled as created by a high school genius's test. The correlational findings also reveal an interesting gender effect, in that women were more likely to watch Dr. Phil and believe that his talk show is helpful. Because of these correlational exploratory findings, sex was included as a quasi-independent variable in further analyses. No effect of participants' sex, or interaction between sex and the experimental manipulation, was found. These findings are very interesting. Although women report watching Dr. Phil more than men and seeing him as helpful more than men, men were still influenced by the power of his name as author of the personality test similar to women.

Layne (1978) concluded that because of the status of a significant authority figure, such as a clinical psychologist, scores from personality tests were more readily accepted, even if the test actually had not been scored. The present study found support for the same notion. Dr. Phil's test may have been accepted more readily because of his exposure to society and his credentials. In Layne's study, students were told that their tests were either scored or not scored by a clinical psychologist. Those who believed they had been scored by a psychologist rated the results as more valid. One distinct difference between Layne's and the present study is that participants rated themselves by self-scoring, but the same effect emerged.

Ludwig et al. (2000) compiled numerous cases of employees who were much happier with their careers after the company they worked for hired a team of researchers to give a personality assessment. When a follow-up was completed in three weeks time, an abundance of employees were happy with the test results and indicated a positive outlook on their careers. The Barnum Effect had influenced these people's satisfaction with their personality description and in turn, their jobs. Interesting to note in comparison with this study, the fictitious high school student had a similar effect (although not as powerful as Dr. Phil). The information provided for a personality assessment was general enough for many of the participants to agree with the outcome. Dr. Phil McGraw's test allows the opportunity for millions of viewers to adapt their lives and personalities to fit with his general descriptions by taking a test and believing general information.

Two important potential limitations emerged after completion of the experiment. One such limitation is the believability of the fictitious gifted high school students. Perhaps a

better comparison to truly demonstrate the power of the "Dr. Phil Phenomenon" would be to have an unknown clinical psychologist (e.g., "Dr. Jones") as the control condition for comparison. The second important limitation is that in the instructions read to participants who received the labeled "Dr. Phil" test, there is an additional endorsement by Oprah. This additional endorsement is a potential confound that needs further investigation.

Although the Barnum Effect, discovered in 1910 (Layne, 1978) is a phenomenon widely researched and discussed, it is evident this phenomenon still exists today. One only needs to flip through a women's magazine (e.g., Cosmopolitan) to find generalized personality tests and descriptors that consumers love. Dr. Phil is a notable and well-known figure, but his use of assessment tools (e.g., self-designed generalized personality test) that are designed to "help" are in serious need of reconsideration.

References

American Psychological Association. (2002). *Ethical Principles of psychologists and code of conduct*. Retrieved January 4, 2006, from http://www.apa.org/ethics.

Carroll, R. T. (2005). The fallacy of personal validation: A classroom demonstration of gullibility. *Journal of Abnormal Psychology, 44*, 118-121.

Chin, P. (2006, January). Real secrets to a happy marriage. *Ladies' Home Journal, 1*, 94-103.

Cottle, M. (2004). The bad doctor. Daddy Knows. *The New Republic, 4,* 19-27.

Dickson, D. H. & Kelly, I. W. (1985). The Barnum Effect in person assessment: A review of the literature. *Psychological Report, 57*, 367-382.

Johnson, J. T., Cain, L. M., Falke, T. L., Hayman, J., & Perillo, E. (1985). The "Barnum Effect" revisited: Cognitive and motivational factors in the acceptance of personality descriptions. *Journal of Personality and Social Psychology, 49*, 5-17.

Layne, C. (1978). Barnum Effect and personality inventory responses. *Journal of Clinical Psychology, 34*, 94-98.

Ludwig, J., Franco, P., & Behm, S. (2000). The chronicles of personalities with connections to disorders. *Journal of Abnormal Psychology, 26*, 13-38.

McGraw, P. (2001). Personality test. Retrieved October 1, 2005, from http://www.drphil.com/

Ventura, M. (2005). The 8 minute cure. *Psychotherapy Networker, 18,* 66-81.

Special Features

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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. In this volume, two students offer opposing views on a controversial issue, and one additional student presents a psychological analysis of a popular theatrical drama.

Controversial Issues -

Parental Involvement in Child Therapy

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In most societies, the first major agent of socialization for individuals is the family (Hickey & Thompson, 2005). The extent of parental involvement in a child's life is influential on the socialization of children and adolescents. As children grow and mature, the socialization given by the family is replaced with other agents, such as peers and the media, but the family often still remains the main agent of socialization. When counseling children, there is a necessity to focus on the child as an individual and as a member of the family. The child in therapy is not only a member of a group, but also a very dependent member (Goggin & Goggin, 1979). When analyzing how involved parents should be in their child's therapy it is important to consider the benefits of resolving past and present issues with the possible parental or non-parental antagonists to achieve closure for the child, the need for a strong parental support base, and the benefits of familial support when parents are involved in a child's therapy.

When parents are involved in therapy with their children, it is necessary to have immediate contact with the parent, should the need arise. Montalvo and Haley (1973) argued that contrary to therapists' claims of influencing the child's inner life, the true efficacy of individual treatment is by virtue of its impact on the family system. Whether dealing with issues of social anxiety, post-traumatic stress disorder, or any other variety of issues, having access to a child's parents or guardians can prove invaluable. An example of this beneficial knowledge would be a situation in which a child was continually being punished for something that the child felt was a normal behavior (e.g., telling his siblings he loved them). If the parents were also in need of therapy, the therapist would be able to bring to the forefront the parents' issue, while giving support to the child and the child's identity.

In this case, with the help of the therapist, the child may feel open and able to communicate the feelings associated with the situation to the parent and the parent may be open to implement a new plan of action with the child. In some cases this family involvement is not possible because the parent is not present, making it difficult for the child to obtain closure on a topic. Another drawback to not having the parents involved is the possible increase in family distress when parental behavior is ignored, maintaining the child's symptomatology (Safer, 1965). If the parent (or other family member) has actively participated in the child's therapy in the past, a logical step would be to involve the parent in the closure-seeking therapy with the child. If the parent is not the antagonist for the child, parental involvement, guided by the therapist can increase parental awareness of the issue, calling for an increase in familial sensitivity to the issue. By involving the parent in the child's therapy, steps to remedy the issues leading to therapy can be taken sooner rather than later on in life.

The need for a strong support base in child therapy is yet another reason why parents should be involved in their child's therapeutic process. If a child is going through a tough issue, it is unlikely that they will have the cognitive capability or coping skills to understand the situation fully. According to Piaget's stages of cognitive development, a child is not be able to reason in the abstract until they reach 12 years of age (Myers, 2002), but a child may need therapy before the age of 12 years. In therapy, it may be necessary to explain consequences, symbols and relationships. Whereas therapists can explain these concepts to the child, the involvement of the parent can often help, for many times the parent knows how to relate the subject matter to the child in a specific, understandable, and effectively way. Many children do not need therapy, yet it is still beneficial for them to have a parental figure to help guide them through life. For example, in times of tragedy, death, or if the family has to move, it is important for children to understand what is happening to them and a parent can be a source for explanation and comfort. In fact, in instances like this, it can be beneficial to have the support of more than one understanding person. Parents and trained therapists can work together for the child(ren)'s benefit. Specifically, the therapist can help the parents adjust their childrearing methods to fit the needs of the child (Goggin & Goggin, 1979).

Parental involvement in children's therapy can foster positive results. Not only will the child be able to benefit from the therapy, but the added (assumedly positive) interactions with the family outside of therapy, can help the child continue the therapeutic process even when the therapist is not present. In a study by Barrett, Dadds, and Rapee (1996), the addition of Family Anxiety Management (FAM) skills to child therapy was more effective in treating separation

anxiety (i.e., an overanxious disorder and social phobia) than just cognitive-behavioral therapy using the Coping Koala Workbook (CKW). In their study, half of the children and parents were taught FAM skills as well as coping skills from the CKW, whereas the other half were only taught to use the CKW. The FAM program trained parents in how to reward courageous behavior and extinguish excessive anxiety in the child using verbal praise, privileges, and tangible rewards made contingent on facing up to feared situations as well as simple contingency management strategies such as descriptive praise, natural consequences, and planned ignoring to reduce conflict and increase cooperation in the family. This finding supports the notion that parental involvement in therapy can be beneficial. Additionally, having parents involved in therapy can add and build on what the child is thinking and feeling – acting as a reference for the child who does not have the cognitive skills/abilities to explain the problem. Spence, Donovan, and Brechman-Toussaint, (2000) examined the treatment of children's social phobias with or without the involvement of parents. The experimental group, with parents involved in treatment, had fewer participants who still experienced social phobias after treatment. Once again, parental involvement was shown to be beneficial.

In summary, there are numerous reasons why parents should be involved in child therapy. The three I have discussed in this paper include: the benefits of resolving issues with parents to achieve closure for the child, the need for a strong parental support base, and the benefits of parental support when parents are involved in a child's therapy. Surprisingly when researching this topic, not much recent information was available. There have been several studies contrasting individual child therapy in contrast to family therapy (Barrett et al., 1996; Goggin & Goggin, 1979; Kaslow & Racusin, 1990), but there is a lack of recent research on how parental much involvement is beneficial for the child. There is also a need for further research examining different therapeutic techniques involving parents and children, and the impact of treatment tailored to specific concerns (e.g., anxiety vs. depression) being addressed in treatment. Finally, research is needed to investigate the impact of level of parental involvement on efficiency and success of therapy for children.

References

Barrett, P. M., Dadds, M. R., & Rapee, R. M. (1996). Family treatment of childhood anxiety: A controlled trial. *Journal of Consulting and Clinical Psychology*, *64*, 333-342.

Goggin, J. E., & Goggin, E. B. (1979). When adult therapists work with children: Differential treatment considerations. *Professional Psychology,* 330-337.

Hickey, J. V., & Thompson, W. E. (2005). *Society in focus* (5th ed.) Boston: Pearson Education.

Kaslow, N. J., & Racusin, G.R. (1990). Family therapy or child therapy: An open or shut case. *Journal of Family Psychology, 3*, 273-289.

Montalvo, B., & Haley, J. (1973). In defense of child therapy. *Family Process, 12,* 227-244.

Myers, D. G. (2002). *Exploring Psychology* (5th ed.). New York: Worth.

Safer, D. J. (1965). Conjoint play therapy for the young child and his parent. *Archives of General Psychiatry, 13,* 320-326.

Spence, S. H., Donovan, C., & Brechman-Toussaint, M. (2000). The treatment of childhood social phobia: The effectiveness of a social skills training based, cognitive-behavioral intervention, with and without parental involvement. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 41,* 713-726.

The Negative Impact of Parent Involvement with Children's Recovery

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Studies investigating parent involvement with child therapy have shown that this can have both a positive and negative impact on the therapy. However, it is believed by some that parent involvement has a negative impact on children during therapy. There are researchers who agree with this suggestion and have done studies and made observations that show that parent involvement negatively impacts children during therapy (Kendall, Chu, Pimental & Choudhury, 2000; Suveg, et al., 2006). These studies discuss many ways that parents can interfere with their child's therapy and recovery from his/her disorder. These studies specifically examined children's therapy for anxiety disorders. These articles discuss the following consequences when parents are included in a child's therapy: parents rescuing the child, under involvement and over involvement of the parents, negative attitudes projected from the parents, coinciding disorders, and disagreement of parents.

Rescuing the child is one of the most prominent of these problems that therapists face when parents are involved with therapy. According to Suveg et al. (2006), rescuing the child is when "parents rescue or accommodate to their child's anxious and avoidant behavior" (p. 291). This rescuing allows children to avoid their anxiety-provoking stimulus, thus leading to a prolonged recovery in which the issues of the whole family must be addressed before continuing on with the child's therapy (Suveg et al.). When parents rescue their children from this anxiety provoking stimulus, they teach the child to only fear it more and can worsen his/her condition. Suveg and colleagues also suggested that the parents' own inability to handle anxiety themselves may interfere with their child's therapy because they feel the need to rescue themselves as well as their child. The parents only see this as being a good parent and thinking that they are doing the right thing when, in reality, they are only hurting their child more.

Parental under involvement and over involvement are also issues when it comes to parents being involved with a child's therapy. Therapists have a hard time deciding how much parental involvement is desirable. Whenever the amount of involvement is decided on, it is often difficult for parents to cooperate with this agreement. Kendall et al. (2000) discussed this issue of under involvement and over involvement in their study. Under involvement interferes with the child's treatment in the sense that treatment may or may not be continued outside of the therapy setting. If a child has activities to do at home, having under involved parents can interfere or slow down the therapy by not helping their child with these activities and to overcome their symptoms. Kendall et al. (2000) also discussed another problem with under involvement is the parents keeping pertinent information from the therapist that would otherwise be helpful in therapy. This information could be useful in treatment planning for the future. Over involvement of parents is also an issue that therapists have to deal with in a child's therapy. Over involvement can be harmful due to the fact that parents can be over protective, and this behavior can prevent the child from gaining a sense of autonomy and independence. Thus, determining an appropriate level of involvement with parents can be problematic and confusing.

Another major issue of parent involvement is the issue of parents having a negative attitude toward their children and their recovery. According to Suveg et al. (2006) "a parent who believes that his/her child is weak, immature, and unable to handle anxious situations may transmit this message to the child verbally or behaviorally" (p. 292). This situation may cause a child to refuse new exposures that may help their treatment. They fear these new exposures due to their belief that they may not be able to cope. Suveg and Zeman (2004) explained this as happening when parents' believe that their child cannot cope successfully; therefore, making their child perceive that he/she also cannot deal with these situations. The lack of confidence from parents can also result in the child refusing treatment and noncompliance with the treatment, and thus, delaying the progress that the child may have made.

Parental involvement can also affect a child's therapy due to the fact parents could have coinciding disorders. Along with the child having a disorder, the parent may also have a disorder, and perhaps the parent could be projecting their own personal issues onto the child. According to Kingery et al. (2006), anxious children often have anxious parents. Suveg et al. (2000) found that parents who experienced anxiety themselves had a difficult time letting their child participate in certain tasks during therapy. The parents' bias about danger from their own disorder "might promote the child's anxious interpretations of events" (Kingery et al., 2006, p. 271). Coinciding disorders for parents and child (ren) can also prevent getting to appointments on time or at all.

Another potential problem discussed throughout the literature is the problem of parents disagreeing on how to help their child. The parent may believe he/she knows what is best for the child and disagree with the therapist's way of treatment. If the parent disagrees with the treatment and does not reinforce the child's recovery, treatment will not progress (Suveg et al., 2006). This situation poses many problems and challenges for the therapist when working on a child's recovery. The therapist must then work with the parents and the child to find a solution that will fit both their needs. This process takes unnecessary time and could prolong the child's recovery, thus putting the child in more danger with their disorder.

All of the problems discussed are ways parents interfere with their child's treatment process; thus, making it difficult for the therapist to treat the child. These studies show that parent involvement in child(ren)'s therapy can be harmful and may set back treatment. Hence, parents should be left out their child(ren)'s treatment for many of the reasons discussed previously. However, it is important to recognize that the research included in this article was based on children with anxiety and the treatments that coincide. Future studies should investigate various therapeutic techniques and styles with parental involvement in child's therapy.

References

Kendall, P., Chu, B. C., Pimental, S. S., & Choudhury, M. (2000). Treating anxiety disorders in youth. In P.C. Kendall (Ed.), *Child and adolescent therapy: Cognitive – behavioral procedures* (pp. 235 – 287). New York: Guilford.

Kingery, J. N., Roblek, T. L., Suvey, C., Grover, R. L., Sherrill, J. T., & Bergman, R. L. (2006). They're not just "Little Adults": Developmental considerations for implementing cognitive-behavioral therapy with anxious youth. *Journal of Cognitive Psychotherapy: An International Quarterly, 20*, 263-273.

Suveg, C., Roblek, T. L., Robin, J., Krain, A., Aschenbrand, S., & Ginsburg, G. S. (2006). Parental involvement when conducting cognitive – behavioral therapy for children with anxiety disorder. *Journal of Cognitive Psychotherapy: An International Quarterly*, *20*, 287-299.

Suveg, C., & Zeman, J. (2004). Emotion regulation in children with anxiety disorders. *Journal of Clinical Child and Adolescent Psychology*, *34*, 750-759.

Psychological Analysis — Dramatic

Even Ordinary People are Susceptible to PTSD

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Posttraumatic Stress Disorder (PTSD) is a common psychological disorder. According to the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM IV-TR, American Psychiatric Association, 2000) PTSD has a lifetime prevalence rate of 8% of the United States population. PTSD is defined as the development of characteristic symptoms following and exposure to an extreme traumatic stressor, causing intense fear, helplessness or horror (American Psychiatric Association). One example of such an event is war. But PTSD does not only occur in those who have engaged in war. This disorder can even happen to ordinary people, which is not only the title of the movie this paper focuses on, but also a reality that is likely to be faced by the victims of recent tragedies like hurricane Katrina.

Ordinary People (Redford, 1980) is a movie about an everyday family. There was the lovely mother, Beth; the hard working father, Calvin, and two athletic, smart sons Buck, and the star of the movie, Conrad. Everything in the family was normal until one afternoon Buck and Conrad went boating and got caught in a bad storm that caused their boat to capsize. Conrad was the only survivor. This traumatic event becomes the focus of the movie from which all problems arise.

After the boating accident, Conrad never seemed to be the same. In watching the movie, one was given the impression that he was a very happy, athletic and sociable person who seemed to bring joy to others before the accident, but after the accident, day-by-day, his life fell apart. This movie critique will discuss the symptoms of PTSD, why Conrad does not have Acute Stress Disorder (ASD), why Conrad might also suffer from depression, and the types of therapies illustrated by the movie.

Diagnosing PTSD

PTSD has three main categories of symptoms (i.e., re-experiencing the traumatic event, avoidance of the stimuli associated with the event, and symptoms of increased Central Nervous System (CNS) arousal; Davison, Neale, & Kring, 2004). The symptom of re-experiencing the traumatic event was well demonstrated in this movie. This illustration was done by showing Conrad having nightmares in the middle of the night during which he would feel as if he were back on that boat with his brother all over again. This disturbance was so strong for Conrad that many nights he would wake up horrified and sweating profusely due to an over activation of his sympathetic nervous system.

Conrad also displayed three symptoms of avoidance, the minimum number necessary to meet the diagnostic criteria for PTSD. In one scene, Conrad was put into a position where he broke down in front of an old friend who had also been a friend to his brother. His friend told him that he would like to help Conrad in any way that he could and that Conrad should not face his problems alone. Conrad told the friend "it hurts too much to be around you" (Redford, 1980). This comment fits the criteria of avoiding people who might arouse recollections of the trauma. This scene showed that Conrad was trying to deal with his problems by avoiding anything that would link his memory with his deceased brother Buck. Conrad also quit the swimming team because it triggered recollections of the traumatic event. This action displays avoidance of activities that might cause recollections. The second avoidance symptom exhibited was Conrad's feeling of detachment and estrangement of others. Throughout the movie Conrad seemed detached from everyone. He demonstrated a lack of emotion that reflected detachment from his inner experience (i.e., restricted range of affect). The third avoidance symptom Conrad displayed was an inability to recall important aspects of the trauma. In the beginning of the movie Conrad never seemed to remember what happened during the boating accident. He recalled a limited number of experiences in his dreams but never the entire accident. It was not until the end of the movie, after working with the therapist that Conrad could recall what really happened that day.

Throughout the movie, Conrad also seemed to be very uneasy, and displayed symptoms of increased arousal. The most obvious was his problems sleeping, which the director displayed by having him wake up during the night. There was also a scene in the movie where he was with a group of friends when a train passed by and he displayed an over-exaggerated startle response, whereas his friends did not seem to even notice. All of these reactions on Conrad's part fit the symptom of increased CNS arousal.

Differential Diagnosis

Why did Conrad fit the criteria for PTSD and not ASD? PTSD is a psychological disorder in which a person is pushed over their psychological limit by a severe or traumatic event. ASD is similar except it lasts less than one month (Davison et al., 2004); meaning the main difference between the PTSD and ASD is duration of symptoms. In Conrad's case, he suffered from PTSD because in the movie he was asked, "How long have you been feeling this way?" and he responded "about a month and a half." This statement shows that Conrad had symptoms longer then the time allotted for ASD, as defined in the DSM IV-TR. Though this scene shows that Conrad has PTSD, it cannot be assumed he never had ASD. It has been observed that those who meet

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the criteria for ASD are likely to develop PTSD (Davison et al., 2004). Although this could be true in Conrad's case, a temporal connection has recently been called into question (Creamer, O'Donnell & Pattison, 2004).

Another issue that needs to be resolved is why Conrad developed PTSD instead of ASD. In this specific case, lack of family support likely influenced the development of PTSD. Throughout the movie, Conrad's family felt like it would be better to just avoid the problem rather than discuss it. This avoidance was especially true of the mother. After losing her son Buck, Beth became withdrawn from Conrad, leading him to feel like it was his fault that Buck died. She never told Conrad it was not his fault or that she was glad he had survived. This lack of support in Conrad's time of need would most likely amplify his guilt and trauma of the already traumatic event making it more likely that this psychological problem would be more complicated and last longer; meeting the criteria for PTSD.

Co-morbidity

In watching this movie one cannot over look the possibility that Conrad might also be suffering from depression. Throughout the movie Conrad displayed many of the symptoms of Major Depression Disorder. The DSM-IV-TR (American Psychiatric Association, 2000) requires that an individual must have "five, or more, symptoms during the same two week period that represent a change from their previous functioning" to meet the criteria for Major Depression Disorder. Conrad displays five. He has a depressed mood most of the day, nearly every day. He has diminished interest or pleasure in most activities. He has problems sleeping at night; has excessive, inappropriate guilt; and has diminished ability to think and concentrate. Further, Conrad has clinically significant distress and impairment in social and occupation functioning. Lastly his symptoms are not due to medications or a general medical condition. These symptoms support a co-morbid diagnosis of Major Depressive disorder for Conrad.

Treatments

In the movie, two types of therapies for were addressed, electroconvulsive therapy (ECT) and Psychodynamic therapy. The portrayal of ECT was not directly shown in the movie, but Conrad talked about the technique with his swimming coach. This type of therapy is known for its use with patients suffering severe depression. According to Bosboom and Deijen (2006), the American Psychiatric Association Committee on Electroconvulsive Therapy considers ECT an effective treatment for depression. What might stimulate interest about this type of therapy is that when the movie was released in 1980, ECT was looked down upon and even seen as barbaric (Arner, 2003). There is controversy still today on the usage and dangers of ECT. So the fact that Conrad was given ECT might give some insight into how bad his depression must have been. This statement is reinforced in the movie when it is learned that Conrad was in such an emo-

tional slump that he tried to commit suicide.

The other form of treatment shown in the movie was Psychodynamic therapy. Psychodynamic therapy is a therapeutic approach in which a therapist tries to help the patient confront issues, memories and feelings they might be suppressing or repressing. In a study done by Brom, Kleber, and Defares (1989), Psychodynamic therapy was shown to have clinically significant improvements in 60% of their overall patients. For Conrad, those feelings were not only the traumatic experience of losing his brother, but the fact that his brother's death was not his fault. An important scene was shown at the end of the movie when Conrad told his therapist "you do one wrong thing and everything falls apart." His therapist asked Conrad what was the one thing that you did wrong and Conrad said, "hold on" (Redford, 1980). The significance of this scene is that Conrad realized that his brother's death was not his fault; he just felt that way because he survived and his brother did not. One could argue that this scene was the most important one in the movie. Conrad, like many other patients with PTSD, burdened himself with this psychological disorder because he felt that if he had done one thing differently, then the whole problem would have never happened. He blamed himself for being the one who lived. In response to these feelings, Conrad's therapist assisted him in realizing that he did nothing wrong, allowing Conrad to free himself from the burden of carrying the death of his brother on his shoulders. This technique (i.e., survivor's guilt) was illustrated in an article by Singer (2004), in which the therapeutic goal was to allow Vietnam veterans to overcome the guilt they felt from war.

Conclusion

The significance of the movie, *Ordinary People,* is that it illustrates the enormous impact PTSD can have on someone's life. The movie also exemplifies how PTSD can easily happen to anyone within a split moment, and how one event, no matter how brief, can change someone forever. The movie even goes as far as showing how PTSD affects more then just the person who has it (e.g., family, friends or even a community).

Watching this movie and its depiction of the depth and pervasiveness of the psychological and social impact of tragedy gives one pause in terms of recent national tragedies. Hurricane Katrina physically devastated massive amounts of property, took thousands of lives, and left thousands more homeless. The psychological impact of the tragedy, although less visible on the nightly news than the physical catastrophe, is captured in a single case in *Ordinary People.* In situations like Hurricane Katrina, where the severity of Conrad's one traumatic experience is multiplied thousands of times, we gain some sense of the full implications on the lives of those caught in the rage. Within the movie and within the discipline of psychology however, there is understanding and hope for those suffering PTSD, Major Depression, and other psychological disorders through recognition and treatment.

References

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

Arner, F. (2003). Shock therapy leaves the cuckoo's nest. *Business Week, 3848,* 65-66.

Bosboom, P. R., & Deijen, J. B. (2006). Age-related cognitive effects of ECT and ECT-induced mood improvement in depressive patients. *Depression and Anxiety, 23,* 93-101.

Brom, D., Kleber, R. J., & Defares, P. B. (1989). Brief psychotherapy for posttraumatic   stress disorders. *Journal of Consulting and Clinical Psychology, 57*, 323-337.

Creamer, M., O'Donnell, M. L., & Pattison, P. (2004). The relationship between acute stress disorder and posttraumatic stress disorder in severely injured trauma survivors. *Behavior Research and Therapy, 42,* 315-328.

Davison, G. C., Neale, J. M., & Kring, A. M. (2004). *Abnormal psychology* (9th ed.). Hoboken, NJ: Wiley.

Helsley, S., Sheikh, T., Kim, K. Y., & Park, S. K. (1999). ECT therapy in PTSD. *American Journal of Psychiatry, 156*, 494-495.

Redford, R. (Director). (1980). *Ordinary people* [Motion Picture]. United States:Paramount Pictures.

Singer, M. (2004). Shame, guilt, self-hatred and remorse in the psychotherapy of Vietnam combat veterans who committed atrocities. *American Journal of Psychotherapy, 54*, 377-385.

Psychologically Speaking

In Pursuit of Big Ideas: An Interview with David Myers

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David Myers is a social psychologist and professor at Hope College in Holland, Mich. He is an award-winning researcher and an effective communicator of psychological science to college students and the general public. Myers has authored 15 books including two popular psychology textbooks, "Psychology" and "Exploring Psychology," and several general-audience books. He has also summarized psychological research for the public through articles in more than three-dozen magazines, from Scientific American to Christian Century.

His scientific writings, supported by National Science Foundation grants and fellowships and recognized by the Gordon Allport Prize, have appeared in two dozen academic periodicals, including Science, the American Scientist, the American Psychologist, and Psychological Science. In addition to his scientific writings, David is the author of five trade books, The Pursuit of Happiness, The American Paradox: Spiritual Hunger in an Age of Plenty, A Quiet World: Hearing Loss and How to Live with It, Intuition: Its Powers and Perils, and What God has Joined Together: A Christian Case for Gay Marriage.

David was born in Seattle, and when not writing, enjoys being an all-weather bicyclist, and an avid noontime basketball player and fan of his college's basketball team. David and Carol Myers married while undergraduates at Whitworth College and are parents of three adult children, sons Peter and Andrew, and daughter, Laura.

In addition to his activities in psychology, Professor Myers has chaired his city's Human Relations Commission, helped found a Community Action Center that assists poverty-level families, and become an advocate for people with hearing loss (www.hearingloop.org).

Recently, he established the David and Carol Myers Foundation, which receives all author royalties from David's introductory psychology textbooks and from his general audience trade books. The Foundation supports a variety charitable and professional organizations including the Association for Psychological Science Fund for Teaching and Public Understanding of Psychological Science, Bread for the World Institute, Project Ethiopia, Society for the Psychological Study of Social Issues, Center for Women in Transition, Fresh Youth Initiatives of New York City, and many others.

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. This interview is designed primarily for the audience of students and, secondarily, for faculty, with particular emphasis 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 three students who will be talking with you are all undergraduates, one from the University of Nebraska at Kearney and two from Bellevue University, located near Omaha, Nebraska.

Stephenson: I understand that your undergraduate degree was in chemistry. Can you describe the pivotal moment when you decided to enter the field of psychology?

Myers: It was just before I got married, at the beginning of the summer of my senior year. My wife's parents were being asked, "what is the young man going to do?" They would say, "he doesn't have a clue." I decided that I wanted to be a professor rather than a physician. Although I had completed my applications to the University of Washington and Oregon medical schools, and had taken the MCATs, I never mailed in those applications. I decided I wanted to become a professor, which meant that I needed something to profess. Psychology was the most interesting subject I had studied in my college experience, even though I had only one course in my first three years. I just thought, what more interesting subject could there be than human beings. Everything else just worked out well after that.

> *I would say my best moments as a teacher, that is my most rewarding times as a teacher have been when years later students will recall what the experience meant to them and how it influenced the course of their lives.*

Bannon: What were some of your best and worst moments as a teacher?

Myers: I would say my best moments as a teacher, that is my most rewarding times as a teacher, have been when years later students will recall what the experience meant to them and how it influenced the course of their lives. That doesn't happen often to us but it is very gratifying when it does. In class, I would say my best moments occurred when I was doing effective demonstrations that were powerful in their impact. It was a joy to watch the faces as they realized what was happening, what they had just experienced.

My worst moments are probably peculiar to me because of my experiences of hearing loss. When a student is saying something and I can't understand what it is, then I have to sometimes guess. I think I got it but sometimes I'm not sure. Often I guess right but sometimes I guess wrong. Then there are some crackles of laughter and then you realize that you just blew it. Sometimes you ask to repeat it but it's that soft voice in a frequency that is too low for me and I still don't get it. Then I start sweating bullets! Sometimes I may ask another student to voice the question for me. Overall, those are my worst moments, when I can't hear you.

Babutzke: In your experience with writing introductory psychology textbooks, what topic in psychology is consistently misunderstood? What advice can you give teachers to correct those misunderstandings?

Myers: The single most misunderstood topic in introductory psychology is negative reinforcement. And if I knew the secret to correcting the common misconception that it means punishment, then I would be a better teacher and writer than I am. In fact for a time, I wanted to take that concept out of the text, because I didn't think that it was particularly important in understanding the mechanisms of reinforcement in shaping behavior. But when I did that, down-played it in the text, I got so many protests from teaching faculty that it was vital, it had to be put back in. I try to teach it with examples. I try to hit people over the head with this concept, but it is still difficult because it is a term that is commonly misused in the popular culture.

Babutzke: What were some of your first areas of research and what do you feel like the true value of research is?

Myers: My first area of research was studying the effects of group discussions on people's attitudes. We experimented with a very interesting phenomenon, which came to be called group polarization, which is the tendency of group interaction to amplify the preexisting tendencies with group members. That proved to be very satisfying for me in two ways that I never expected. The first was that it turned out to be a widely applicable phenomenon. Even now it is applied to the understanding of the emergence of terrorist mentality amongst a group of people who share a common grievance. Additionally, in doing research, I got to know somebody who recommended me for a writing assignment for a social psychology textbook. That led to a shift in my vocational identity from being a research psychologist and teacher to being a teacher through writing. Everything followed from that. The writing really grew out of the research, and my getting to know other people, through my work.

Bannon: Your most controversial work to date is, "What God has joined together: A Christian case for Gay Marriage." Many religious communities do not accept gay marriage. Do you believe this lack of acceptance directly affects homosexuals in their marriage?

Myers: Yes. Part of what that book does is make the case for marriage. I think that there is a lot of evidence that marriage contributes to the happiness and well being of children. Social psychologists are talking these days about our deep need to belong and marriage is one significant way in which that need to connect in close, supportive, intimate relationships is satisfied. There are also a host of legal rights that come with the institution of marriage. Currently in the USA, outside of Massachusetts, gay and lesbian people are denied the right to full equality in marriage and all the rights that come with marriage. Evidence continues to accumulate that sexual orientation is a natural and enduring disposition which is probably better accepted than denied by those with a well-defined sexual orientation. Given that the Bible has very little to say about this topic compared to lots of other topics that are really important, and given that biblical scholars disagree about what those few texts are actually saying in the context of their time, it seems reasonable to me that the faith community needs to rethink its position on the marriage and ordination to church office of the people who have same sex orientation. I think that change is gradually happening. It is happening partly because of the change in generations. There is a huge generation gap in attitudes towards same sex marriages and the ordination of gay people to church office. Eventually, today's younger adults will be tomorrow's older adults and church leaders.

Bannon: To follow up on that, religion in any area seems to be a controversial issue that many avoid. Could you ex-

plain why you have embraced it as an important component in your life and work?

Myers: I am a person of faith whose life has gained meaning through religious faith. It is an important part of my identity. Therefore it becomes natural for me to ask how religious insights in human nature correlate with psychological science's ideas about human nature. Part of what I have done is try to build a bridge between those two understandings of human nature. I have written books trying to relate psychological science to biblical understandings.

Babutzke: In talking about bridging the divide between psychology and religion, in many of your research articles you talk about the healing powers of both medicine and religion. Where do you believe that these paths of healing traditions separated and in fact do you see a reconvergence in the immediate future?

Myers: Historically, healing was very much a part of the church. In fact, modern medicine to a large extent grows out of the church. Hospitals and the spread of medicine worldwide were spread by missionaries. In more recent times, it has become more separated. We now understand the germ theory of disease and so we tend to see disease and health less in spiritual terms and more in physiology terms, and appropriately so. However, recently there has been some re-convergence because there is this huge area of research on religion, spirituality, and health. It turns out that people who are connected with others in faith communities experience social support and helping them cope with the terror of their inevitable death. They are also at somewhat lesser risk for harmful lifestyle practices since they are less likely to smoke. Even when controlling for smoking rates between religious and nonreligious people there is still something there that contributes to health. It may have to do with the communal nature of religion. People are debating what that is. But there are studies that show that there is a religious factor. It actually took me a long time to be convinced of that and to decide that religion-health research, and criticisms of it, deserve some attention in my introductory text.

Stephenson: The David and Carol Meyers Foundation helps support psychological science. What was your inspiration for starting the foundation?

Myers: My wife and I faced a question that we had to think long and hard about and that is, "how much money is enough"? We considered how much was enough for any eventuality, contemplating catastrophes toward our children, my becoming incapacitated, or whatever worst case scenario we could imagine, and we reached a point where we agreed that we had enough. From that point forward we assigned all the royalties from my introductory psychology texts to a family foundation. It goes to support psychological science but also to other things.

Most of the money has yet to be given and I don't know where it is going to go. The foundation will not survive us however. From a financial point of view, it means that my introductory psychology texts are a volunteer activity.

The real answer to your question is that our conviction, as people of faith, is that when we are given resources, we are stewards of those resources. They aren't in some ultimate sense ours, we are just holding them, and we are morally responsible for the disposition of those resources. We do not believe in inherited wealth. We love our three children dearly but they will not become wealthy as a result of our having these resources, and they understand that.

Stephenson: You are recognized as a leader in a variety of academic fields. In your opinion, what was your most influential work?

Myers: I would say that my most influential work would be my introductory and social psychology textbooks. The audiences they reach are so much larger than the group of people who are impacted by the things that I do in any other way. It is a great privilege to assist in the teaching of psychology. With so many teachers in psychology and with so many students, it is a keenly felt responsibility to do it well and get it right.

Babutzke: As a liberal arts scholar, you have mentioned that you enjoy relating psychological perspectives of human nature to wisdom found in other fields. Have you been met with some resistance in these other fields? What do you see on the horizon?

Myers: First you are right, I love to relate psychological science to everything else that students are studying and are involved in: politics, history, literature, religion, sports, sociology, and so forth. By and large I think that people have appreciated this. However, some people have occasionally complained that making allusions to sports or religion, or even politics, grates on their sensitivity. They wish it wasn't there. While I understand their concerns, I am trying to present psychology from a liberal arts perspective. To do this, I try to show how psychological science is connected to other things the students are learning and experiencing.

Bannon: Since both religion and science are major themes in your work, have you had to deal with criticism from other colleagues that these two topics should remain apart?

Myers: Yes, and on many occasions I have been told by representatives of my textbook publishers that people are skeptical of books that are written by a person who is an "out-of-the-closet" person of faith. My answer to that would be three-fold. One, I am relating psychological science to all sorts of other fields and I am not going to

censor any topic of interest. Number two; my obligation is to report psychological science as it is. If I am ever being parochial or biased, call me on it. I certainly try not to be. I try to be a faithful, honest reporter of psychological science. Third, I am part of an ever-reforming religion that has a deep respect for science, and in fact helped to give birth to modern science. We believe that this is God's whole world and we are charged with exploring it and discerning its laws. It is worshiping God with our minds. So for me, doing serious, rigorous, free-spirited science is mandated by, rather than in conflict with my religion.

> *...doing serious, rigorous, free-spirited science is mandated by, rather than in conflict with my religion.*

Babutzke: A very interesting point. On that note, do you have any future works coming out that we can look forward to?

Myers: I have an article on the powers and perils of intuition coming out in Scientific American Mind [this appeared June/July, 2007]. I have a passion for advocating hearing aid compatible assisted living for people with hearing loss. In the United States, if you go to a movie theater, they are required by the Americans with Disabilities Act to provide you with assistive listening equipment if you ask for it. It comes in the form of a portable receiver and headset. You go to the closest theater to where we are sitting right now, and those units will all be on the shelf and nobody will be using them. There is an alternative technology that is widely applied in the United Kingdom, Denmark, and Australia and is almost unknown in the United States. It broadcasts sound to hearing aids like Wi-Fi to a laptop computer. We have introduced this technology in my area of Michigan in most of the churches and auditoriums. All I have to do is activate a small "telecoil" receiver in my hearing aid and suddenly the loudspeakers are in my ears. If you listen to television and sit beside me, the television broadcasts to you from its speakers and to me into my hearing aid. It is so cool and so inexpensive; it is designing technology to suit people.

The way we have done assisted listening in the United States is not designed to suit people. It is conspicuous, it is hard to locate, and it takes effort as opposed to pushing a button. I have a website that is hearingloop.org if anyone wants to visit it. I have written eighteen articles about this technology, I have CBS news interested in doing a segment. The US House of Representatives has it in their main chamber, and the Grand Rapids Michigan Airport is about to install it throughout its concourses. My ultimate aim is to help double the functionality of hearing aids, by working toward the day when they can serve not only as microphone amplifiers but also as wireless in-the-ear loudspeakers for sound broadcast from TVs, PA systems, telephones, and more.

Babutzke: Any final thoughts you would like to share with us?

Myers: I have read with real interest the recent aggressive atheist critiques of religion by Richard Dawkins and Sam Harris and others. I have also read the corresponding books on the other side like human genome director Francis Collins' book: *The Language of God.* I am interested in writing something that responds to the secular critique of religion, much of which I agree. I also would try to explain how some of us can be hard-nosed skeptics about lots of things, while also embracing a faith that seems rational, positive, and meaningful. Right now, the writing I am doing is to clarify my own thinking. [Editor's note: The result will appear as a short book due to be published by Jossey-Bass in August, 2008.]

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) copies of the a 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. The Special Features section of the current issue (pp. 30-32) contains an example of the types of psychological analysis students may submit.

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) copies of the a 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:

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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) copies of the a 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.

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