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EDITOR'S INTRODUCTION

The Wagner Forum for Undergraduate Research is an interdisciplinary journal which provides an arena where students can publish their research. Papers are reviewed with respect to their intellectual merit and scope of contribution to a given field. To enhance readability the journal is typically subdivided into three sections entitled *The Natural Sciences*, *The Social Sciences* and *Critical Essays*. The first of these two sections are limited to papers and abstracts dealing with scientific investigations (experimental and theoretical). The third section is reserved for speculative papers based on the scholarly review and critical examination of previous works.

This issue contains several noteworthy papers which encompass a variety of topics including biochemical research involving GFP (green fluorescent protein), psychiatric hospitalization and same-sex domestic violence. The interested reader will explore the ramifications of stem cell research and rethink the decision to end WWII by dropping an atomic bomb on Hiroshima.

Read on and enjoy!

Gregory Falabella and Richard Brower, Editors

Section I: The Sciences

- 2 Design and optimization of an amplification protocol for detecting GFP gene expression in *E. coli* by RT-PCR
Megan Hogan

Section II: The Social Sciences

- 16 The Implications of Priming on the Attitudes of College Students Experiencing Theatrical AIDS Education Therapy: How Therapeutic Is It?
Carolyn Tudisco
- 31 Labor Market, Earnings and Black-White Health Benefit Coverage
Lauren McMahon and Jonathan Ohn
- 33 Psychiatric Hospitalization: Is it Treatment or Torture?
Melissa D. Travostino
- 40 How Name Discrimination Can Occur in Resume Assessment
Kathariya Pungdumri

Section III: Critical Essays

- 62 The Destruction of Hiroshima: The Decision to Drop the Bomb
Alla Bronskaya
- 69 Stem Cell Research: Its Possibilities, Potential Hazards and Obstacles
Lauren Maltese
- 80 Hagar
Stephanie Williams
- 84 Esther
Rachel Dudley
- 90 Same-Sex Domestic Violence
Shara Zaslow

Section I: The Sciences

Design and optimization of an amplification protocol for detecting GFP gene expression in *E. coli* by RT-PCR

Megan Hogan (Chemistry)¹

I. Introduction

Green fluorescent protein (GFP), originally isolated from the bioluminescent jellyfish *Aequorea victoria*, has of late become an important tool in biochemical research¹. Green fluorescent protein (molecular weight = 27 kDa, fluorescence λ_{\max} = 508 nm) is localized together with aequorin, a 21.4 kDa, Ca^{2+} -regulated photoprotein or luciferase, within the light-generating granules (lumisomes) of *A. victoria* photocytes^{2, 8, 9}. Although the actual role of bioluminescence in the *A. victoria* lifecycle is unknown, other species of jellyfish generate light as a defensive mechanism, emitting bright flashes that are thought to temporarily startle potential predators or warn them of a potentially poisonous meal^{1, 10}.

The chemiluminescent protein aequorin consists of an apophotoprotein (apoaequorin) and an imidazolopyrazine derivative called coelenterazine. Within the active site of aequorin, coelenterazine reacts with molecular oxygen to form a highly reactive chromophore or luciferin called hydroperoxycoelenterazine⁶. When aequorin is mixed *in vitro* with three equivalents of Ca^{2+} , it catalyzes the decarboxylation of hydroperoxycoelenterazine to form an excited state of coelenteramide, which subsequently stabilizes by falling to its ground state and emitting a photon of blue light (fluorescence λ_{\max} = 470 nm). If, however, the reaction is carried out in the presence of an excess of GFP, a green fluorescence is observed instead; the longer wavelength of the light emission is thought to be the result of resonance energy transfer from the excited state of coelenteramide (within aequorin) to GFP⁶. In the absence of aequorin, GFP shows fluorescence only when exposed to long-wave ultraviolet (LW-UV) irradiation.

Ormö *et al.* (1996) were the first to determine the crystal structure of purified GFP. Wild-type GFP consists of 238 amino acid residues and has two maximum absorption peaks at 395 and 475 nm⁴. GFP is folded in an 11-stranded cylindrical β barrel 42 Å long and 24 Å in diameter wrapped around a central helix⁴. Each strand in the cylindrical barrel consists of 9 to 13 residues⁴. The intrinsic fluorescence of GFP

¹ Research performed under the direction of Dr. Roy H. Mosher (Biological/Physical Sciences) in partial fulfillment of the Senior Program requirements.

requires no prosthetic group and originates from a fluorophore that is generated as a result of a spontaneous reaction between three amino acids within the protein itself⁴. The GFP fluorophore is formed autocatalytically by the posttranslational cyclization and oxidation of the tripeptide Ser⁶⁵-Tyr⁶⁶-Gly⁶⁷ within the primary structure of the native protein³.

Because GFP requires no special cofactors or additional groups to function, it has found a variety of uses in both cellular and biochemical research. Many of these applications employ GFP as a molecular tag to follow protein transport and localization within a cell or to trace the proliferation and migration of specific cell types within a developing embryo; GFP has also been used frequently as a convenient tool for studying gene expression under a variety of cellular conditions⁵. In summary, the functional utility of GFP stems not only from its ease of use and flexibility but also from the fact that even a single cell expressing it produces a readily detectable green fluorescence under LW-UV light⁵.

In order to use GFP as a molecular tag, a DNA fragment encoding the *A. victoria* GFP gene (*gfp*) must be introduced into a host cell through a process known as transformation or transfection. During this procedure, host cells are made competent to take up DNA from their external environment. To ensure stable maintenance within the host cell, DNA fragments carrying the desired genes are usually inserted into small, autonomously replicating DNA molecules called plasmids prior to the transformation procedure. In the present study, cells of the Gram-negative bacterium *Escherichia coli* that had been transformed with the recombinant plasmid pHisGFPuv (which carries a copy of the *A. victoria* GFP gene) were used as an abundant source of template DNA for all experimental procedures⁷.

Once cells have been transformed with *gfp*, gene expression can be monitored using both direct and indirect methods. The process of gene expression in bacterial cells first requires that a gene be transcribed into messenger RNA (mRNA), which then serves as a template for the synthesis of a specific polypeptide during the second phase of gene expression known as translation. Since GFP becomes fluorescent almost immediately after it is translated, the extent to which protein synthesis occurs can be determined directly by visual inspection of bacterial colonies illuminated by LW-UV light. Cells producing even low amounts of GFP glow green and, to a certain extent, the strength of the observed fluorescence is proportional to the amount of protein produced; however, relative levels of fluorescence can be estimated most accurately using a spectrofluorometer.

To monitor gene expression at the transcriptional level, a less direct method of detection such as the reverse transcriptase-polymerase chain reaction (RT-PCR) must be used. The polymerase chain reaction (PCR) is a technique that was initially developed to

amplify very small amounts of a specific DNA sequence (the target sequence) to facilitate further analysis. The procedure begins by heating a solution of DNA containing the target sequence until the two strands of the double helix separate or denature. Two single-stranded oligonucleotide primers with sequences complementary to opposite strands of the DNA molecule at the left-hand and right-hand boundaries of the target sequence, respectively, are added and the temperature is lowered to allow annealing of the primers to the target sequence. The temperature is then raised and a thermostable DNA polymerase (usually *Taq* polymerase), along with the requisite deoxynucleoside triphosphates (dNTPs), is added to catalyze extension of the primers from their 3' termini in the 5' to 3' direction. The cyclic process of heating to denature the template and primer sequences, cooling, and then heating the reaction mixture to the optimum temperature of the DNA polymerase, is then repeated 25 to 30 times and results in an exponential amplification of the target sequence copy number.

RT-PCR is a procedure that is used when the desired sequence to be amplified is located within a RNA molecule. Because the PCR procedure can only amplify DNA sequences, a complementary DNA (cDNA) copy of the RNA molecule must first be synthesized. The RT-PCR procedure begins by isolating the RNA containing the desired target sequence. A RNA-dependent DNA polymerase (reverse transcriptase), dNTPs, and a deoxyoligonucleotide primer complementary to the 3' end of the RNA molecule are added to the RNA. Reverse transcriptase then extends the annealed primer from its 3' terminus generating a single-stranded DNA molecule that is complementary to the RNA template strand; the target sequence within the cDNA can then be amplified by PCR.

In this study, optimal PCR conditions required to amplify a portion of the GFPuv gene from pHisGFPuv were determined (Note: The GFPuv gene is a mutated version of the wild-type GFP gene, which encodes a protein that produces a much stronger fluorescence when exposed to UV light). In addition, a method for verifying the identity of the amplified DNA fragment was established. These results represent an essential first step in the development of a RT-PCR protocol for detecting *gfp* expression in *E. coli* at the transcriptional level.

II. Materials and Methods

Chemicals and reagents

Qiagen (Valencia, CA) synthesized both forward (GFPuvF) and reverse (GFPuvR) oligonucleotide primers. A 200 base pair DNA ladder (Edvotek; West Bethesda, MD) and a 100 base pair DNA ladder (New England Biolabs; Beverly, MA) were used as size markers during agarose gel electrophoresis. PuReTaq Ready-To-Go PCR Beads (Amersham Biosciences; Piscataway, NJ) and wax pellets (Edvotek) were

used for PCR. DNase-free/RNase-free water (Invitrogen; Carlsbad, CA) was used to prepare all solutions and in all reactions. Molecular biology grade agarose (Bio-Rad; Hercules, CA) was used to prepare agarose gels for electrophoresis. Restriction enzyme *NdeI* and 10X NEBuffer 4 (New England Biolabs) were used to verify the results of PCR. All other chemicals were of reagent grade unless otherwise specified.

Buffers and solutions

All solutions made for direct use in PCR were prepared under a Biohazard hood, and pre-sterilized micropipettor tips with aerosol filter blocks (Fisher Scientific; Fairlawn, NJ) were used to transfer and measure solutions. Latex gloves were worn at all times to protect against DNase and RNase contamination. Solutions of 1 M Tris-HCl buffer (pH 8) and 0.5 M EDTA (pH 8) were both obtained from Invitrogen. A solution of 50X TAE electrophoresis buffer (Edvotek) was diluted to 1X strength for use in agarose gel electrophoresis. An ethidium bromide solution (1 $\mu\text{g}/\text{mL}$) from Modern Biology Inc. (West Lafayette, IN) was used to stain agarose gels for visualizing DNA bands by UV transillumination. TE buffer (pH 8) consisted of 10 mM Tris-HCl (pH 8) and 1 mM EDTA (pH8), and was prepared by diluting stock solutions of 1M Tris-HCl (pH 8) and 0.5 M EDTA (pH 8) in DNase-free/RNase-free water. Primer stock solutions were prepared by briefly centrifuging tubes of freeze-dried oligonucleotides and then adding enough TE (pH 8) buffer to give solutions with a final concentration of 100 μM or 100 pmol/ μL ; stock solutions were dispensed in 12- μL aliquots that were stored at -20°C . Primer working solutions were prepared by combining 10 μL of primer stock solution with 90 μL of DNase-free/RNase-free water, giving a final concentration of 10 μM or 10 pmol/ μL ; working solutions were dispensed in 10- μL aliquots and then stored at -20°C .

Culture conditions

Cells of *Escherichia coli* DH5 α F'IQ + pHisGFPuv were obtained from Janette Lebron. Cultures of *E. coli* had been grown for approximately 16 hours with shaking (\sim 200 rpm) at 37°C in 50 mL of LB broth (www.difco.com) supplemented with 100 $\mu\text{g}/\text{mL}$ ampicillin and 0.25% (w/v) L-arabinose in a 250-mL Erlenmeyer flask. To harvest cells, 1.5-mL aliquots of culture broth were placed into sterile microcentrifuge tubes and centrifuged at full speed (16,000 x g) in a microcentrifuge. The supernatant was decanted and the cell pellets were frozen at -80°C .

Extracting plasmid DNA

Plasmid DNA was extracted using a Quantum Prep Plasmid Miniprep Kit (Bio-Rad) as recommended by the manufacturer. Briefly, a frozen cell pellet was thawed

rapidly at room temperature and resuspended in the residual liquid; the resulting cell suspension was transferred to a 2-mL microcentrifuge tube and spun at full speed in a microcentrifuge for 30 s. The supernatant was removed and the pellet was resuspended in 200 μ L of Cell Resuspension Solution by briefly agitating on a vortex mixer; the suspension was then combined with 250 μ L of Cell Lysis Solution. The tube was inverted ten times and the resulting cleared lysate was combined with 250 μ L of Neutralization Solution. The tube was inverted ten times and centrifuged for 5 min and the supernatant was then transferred to a spin column placed inside a 2-mL wash tube. Quantum Prep Matrix (200 μ L) was added and mixed with the supernatant by pipetting the solution up and down; this was then centrifuged for 30 s at full speed and the filtrate was discarded. Wash Buffer (500 μ L) was added to the spin column and centrifuged for 30 s; the filtrate was discarded. Another 500- μ L portion of Wash Buffer was added to the spin column and centrifuged for 2 min. The spin column was transferred to a 1.5-mL microcentrifuge tube and a 100- μ L portion of sterile deionized water (preheated to 70°C) was added to the surface of the spin column and the plasmid DNA was eluted by centrifuging at full speed for 1 min.

Primer design and synthesis

Oligonucleotide primers were designed using the Primer3 online software available on the MIT web page (http://frodo.wi.mit.edu/cgi-bin/primer3/primer3_www.cgi). The GFPuv nucleotide sequence (Accession # U62636) was obtained from the GenBank Database (<http://www.ncbi.nlm.nih.gov/Genbank/index.html>) and uploaded into the Primer3 software. The selected primers were chosen to minimize 3'-intra-primer and inter-primer annealing and amplify a 247-bp DNA fragment within the GFPuv open reading frame (orf). Both primers were 20 nucleotides in length and bound, respectively, to opposite ends of the DNA fragment to be amplified and on opposing strands (Appendix 2). The forward primer (GFPuvF) had the sequence: 5'-GTCAGTGGAGAGGGTGAAGG-3'. The reverse primer (GFPuvR) had the sequence: 5'-CAGCACGCGTCTTGTAGTTC-3'.

The GFPuv nucleotide sequence was analyzed for restriction endonuclease cleavage sites using the Sequence Manipulation Program at the University of Alberta, Edmonton, AB, Canada (<http://www.ualberta.ca/~stothard/javascript/>). The sequence was uploaded into the "Rest & Trans Map" program to produce a restriction map of unique sites within the region of the GFPuv orf to be amplified. The program indicated the presence of a single site for the restriction endonuclease *NdeI* (see Appendix 2), such that upon digestion with the enzyme the predicted 247-bp amplicon should be cleaved into two DNA fragments of 101 bp and 146 bp, respectively.

Setting up the polymerase chain reaction (PCR)

To estimate levels of plasmid DNA, samples of pHisGFPuv DNA extract were electrophoresed along with known quantities of phage lambda DNA (Edvotek) through an agarose gel, stained with ethidium bromide, and observed by UV transillumination. A sample of the plasmid DNA extract was then serially diluted to give template DNA solutions of approximately 100 pg/ μ L and 10 pg/ μ L, respectively. All reactions were carried out in thin-walled 0.5-mL microcentrifuge tubes containing PuRe*Taq* Ready-To-Go beads and suspended to give a final volume of 25 μ L. The final reaction mixture contained 2.5 units of PuRe*Taq* DNA polymerase, 10 mM Tris-HCl, (pH 9.0), 50 mM KCl, 1.5 mM MgCl₂, and 200 μ M of each dNTP. Three reaction tubes were set up and contained, respectively, the following:

	NT Control tube	50 pg DNA tube	500 pg DNA tube
DNA template	0 μ L	5 μ L (10 pg/ μ L)	5 μ L (100 pg/ μ L)
GFPuvF (10 μM)	2 μ L	2 μ L	2 μ L
GFPuvR (10 μM)	2 μ L	2 μ L	2 μ L
Water	21 μ L	16 μ L	16 μ L

Cycling conditions for PCR

The thermocycler program for PCR (Appendix 1) was conducted on a MJ Research Minicycler. Prior to initiating the cycling program, a wax pellet was aseptically added to each reaction mixture, which was then denatured at 95°C for 5 min. The cycling program incorporated a touchdown procedure during which the annealing temperature was decreased by 0.5°C/cycle from 65°C to a touchdown annealing temperature of 50°C. The first cycle of the program consisted of a denaturing step of 95°C for 1 min, an annealing step of 65°C for 2 min and then an elongation step at 72°C for 45 seconds. The next 9 cycles were identical to the first except that the annealing temperature was reduced by 0.5°C/cycle. For the next 20 cycles, the annealing temperature continued to drop 0.5°C /cycle until it reached 50°C, and the length of the extension time was increased by 5 s/cycle. For the final 10 cycles, the annealing temperature was maintained at 50°C and the length of the extension time continued to increase by 5 s/cycle. The cycling program ended with a final extension step of 7 min. The reaction mixture was then cooled to 4°C and stored at -20°C.

Electrophoresis

Gels were cast at 0.8% (w/v) or 1.5% (w/v) agarose in 1X TAE buffer. Agarose powder (0.24 g or 0.45 g) was added to 30 mL of 1X TAE buffer in a 250-mL Erlenmeyer flask and heated to boiling in a microwave oven until completely dissolved. The molten agarose solution was allowed to cool for ten minutes, after which it was

poured into a mini-gel casting frame (7 x 7 cm) with a well-forming comb at one end. The molten agarose was allowed to harden for approximately 25 min at room temperature before the comb and rubber dams were removed from the casting tray. The agarose gel was placed into an electrophoresis chamber and 1X TAE buffer was added until the gel was completely submerged. Samples were prepared for electrophoresis by combining 10 μ L (final volume) of sample solution with 2 μ L of 5X loading dye (Bio-Rad); samples were then loaded into the wells of an agarose gel through the layer of buffer covering it. Gels were typically run at 80 V for 1 h, and then transferred to a solution of ethidium bromide (1 μ g/mL) for 10 minutes; to remove unbound ethidium bromide, gels were placed in an equal volume of distilled water for 5 min. To visualize fluorescent DNA molecules, stained gels were transilluminated with long-wave UV light and photographed by a Kodak Digital Camera assembly.

Restriction enzyme digest conditions

DNA digestion with restriction endonuclease *NdeI* was carried out in a sterile 1.5-mL microcentrifuge tube and the reaction mixture consisted of: 5 μ L of PCR products, 1 μ L of 10X NEBuffer 4, 3 μ L of water, and 1 μ L of *NdeI* (20 U/ μ L). The reaction was incubated at 37°C overnight and then stored at -20°C.

III. Results and Discussion

To confirm the presence and integrity of DNA in plasmid extracts, samples were separated by agarose gel electrophoresis. The agarose gel shown in Fig. 1 confirmed the presence of primarily covalently closed circular (ccc) DNA in the pHisGFPuv plasmid DNA extract, with only minor amounts of open circular (oc) and single-stranded (see faint bands running slightly faster than ccc DNA in Fig. 1) forms of the plasmid; no *E. coli* chromosomal DNA was visible in the plasmid extract. Although the amount of DNA extract loaded into lane A was twice that in lane B, the intensity of the bands in both lanes did not differ. However, a faint band was observed in the lane directly to the left of lane A; this may have been the result of a sample spillover during the loading of lane A, and is the most likely explanation for the less-than-expected amount of DNA in this lane. Lane C, the phage lambda DNA sample, was used as a control to confirm that the electrophoresis and staining procedures had worked as expected and provided a reference for estimating the relative amount of plasmid DNA present.

To amplify a 247-bp portion of the GFPuv orf two oligonucleotide primers, GFPuvF and GFPuvR, were synthesized. GFPuvF was designed to base pair (5' to 3') with the template strand of the GFPuv orf beginning at nucleotide 85 and ending at nucleotide 104, whereas GFPuvR was designed to base pair (5' to 3') with the nontemplate strand of the GFPuv orf beginning at nucleotide 332 and ending at nucleotide 313 (see Appendix

2). In this experiment, three PCR mixtures were prepared. The first mixture (NT DNA PCR) was a negative control that lacked template DNA but possessed all of the other components required for PCR. The second mixture was identical to the first except that it contained 50 pg of pHisGFPuv DNA as the template for PCR, while the third mixture had 500 pg of template DNA.

To determine the outcome of these reactions, samples of all three were size-fractionated by agarose gel electrophoresis. Lane A of the gel (Fig. 2) was loaded with a sample of the no-template (NT) DNA control, and showed no visible amplification products following electrophoresis. This result confirmed that none of the components used in the PCR had been contaminated with template DNA, and that amplification was dependent on the presence of pHisGFPuv DNA.

Lanes C and D (see Fig. 2) were loaded with samples of PCR products from the reaction mixtures containing 50 pg and 500 pg of template DNA, respectively. Both reactions possessed a major amplification product (*i*; see Fig. 2) that migrated to a position in the gel located between the 200-bp and 400-bp size markers in Lane B. In fact, the position of the amplicon band indicated that it was only slightly larger than the 200-bp size marker; a result that was completely consistent with the expected 247-bp amplification product predicted from the sequence of the GFPuv gene. Higher molecular weight amplicons (*ii*, *iii*, and *iv*; see Fig. 2) were also present in the reaction products but the low intensity of their fluorescence, relative to that of the major amplicon, indicated that they most likely derived from nonspecific binding of the primers to other sites on the pHisGFPuv plasmid. The presence of nonspecific amplification products in a PCR is usually the result of using either too much template DNA or excessive levels of the primers relative to the template DNA.

To verify the identity of the major amplicon, a portion of the PCR products was digested with restriction enzyme *NdeI*. Sequence analysis of the GFPuv orf indicated that the part of the gene amplified by primers GFPuvF and GFPuvR contained a single site for *NdeI*. Digestion of the expected amplicon with *NdeI* should, therefore, generate two restriction fragments of 101 bp and 146 bp, respectively.

Lane B (Fig. 3) shows the result of the *NdeI* digestion. The product of this reaction was a thick band that migrated between the 100-bp and 200-bp size markers. The faster migration of this band, relative to that of the major amplicon in the undigested PCR products (lane C, see Fig.3), indicated that the PCR product had indeed been digested. The thickness of the DNA band observed in lane B was consistent with the presence of a doublet composed of two restriction fragments of 101 bp and 146 bp, respectively, that had not been fully resolved during electrophoresis. To separate the two restriction fragments, the digest should be fractionated through a gel with a higher agarose concentration (e.g. 2% or 3%).

In conclusion, the primers and PCR protocol developed in this study can be used to specifically amplify a portion of the GFPuv gene using pHisGFPuv as a template. These conditions can now be used to develop a procedure for detecting GFPuv transcription by RT-PCR.

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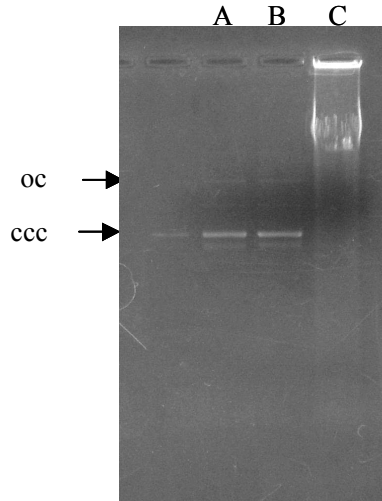


Figure 1: Electrophoresis of (a) 10 μ L of pHisGFPuv DNA extract, (b) 5 μ L of pHisGFPuv DNA extract and (c) 0.25 μ g of undigested phage lambda DNA through a 0.8% (w/v) agarose gel, at 80V for 1h in 1XTAE.

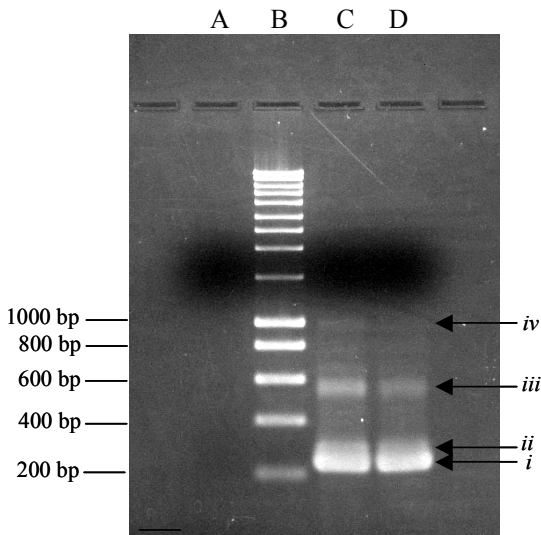


Figure 2: Electrophoresis of (a) 5 μ L of NT control PCR products, (b) 2 μ L of 200bp DNA ladder, (c) 5 μ L of 50pg DNA PCR products through a 1.5% (w/v) agarose gel, at 80V for 1h in X TAE

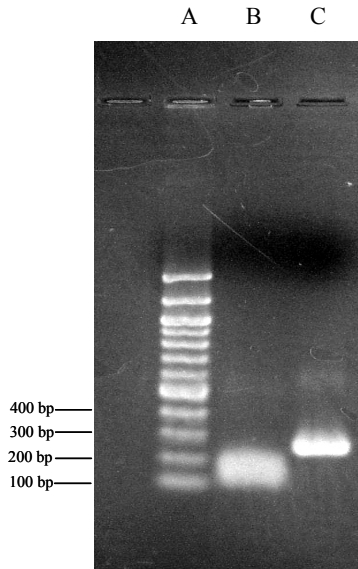


Figure 3: Electrophoresis of (a) 1 μ L of a 100bp DNA ladder, (b) 10 μ L of *Nde* I-digested PCR products and (c) 5 μ L of undigested PCR products through a 1.5% (w/v) agarose gel, at 80V for 1h in 1X TAE.

Appendix A: Thermocycler Program for PCR

- Step 1 95°C 5 minutes
- Step 2 95°C 1 minute
- Step 3 Increment 65°C 2 minutes -0.5°C/cycle
- Step 4 72°C 45 seconds
- Step 5 Go to step 2 9 more times
- Step 6 95°C 1 minute
- Step 7 Increment 60°C 2 minutes -0.5°C/cycle
- Step 8 Extend 72°C 50 seconds 5 seconds/cycle
- Step 9 Go to step 6 19 more times
- Step 10 95°C 1 minute
- Step 11 50°C 2 minutes
- Step 12 Extend 72°C 2 minutes seconds 5 seconds/cycle
- Step 13 Go to step 10 9 more times
- Step 14 72°C 7 minutes
- Step 15 4°C 0 hours 0 minutes 0 seconds (indefinitely)

Section II:
The Social Sciences

The Implications of Priming on the Attitudes of College Students Experiencing Theatrical AIDS Education *Therapy: How Therapeutic Is It?*

Carolyn Tudisco¹ (Psychology)

While theatre has been promoted as an effective tool for AIDS education, few true experiments have explored the topic, especially in the demographic of college-age Americans. This study explores whether a simple priming exercise before a theatrical performance relating to AIDS will affect AIDS awareness or empathy towards characters inflicted with the disease. Scenes selected from an AIDS-related play were performed, and participants were randomly assigned to complete one of two priming questionnaires beforehand. One prime asked the participants to report their attitudes regarding their susceptibility to AIDS as well as opinions about people with the disease. The control prime asked participants about theatrical attitudes. While the hypothesis predicted that participants who were primed with the AIDS questionnaire would report more empathy towards the characters on a post performance survey, the theatre prime actually led to more empathetic expressions. It is possible that the AIDS prime unintentionally alerted the participants' knowledge function of attitudes, and since the show was very emotionally based, they were less likely to absorb the messages of tolerance and sympathy intended. A non-theatre control group who did not attend the performance reported less empathy than either of the performance groups, compliant with the hypothesis.

I. Introduction

Educators concerned with every field from unemployment to mental illness have explored the use of theatrical productions to portray important issues and to enhance the effectiveness, enduringness, and aesthetic appeal of their lessons (Dichter, 1992; Bumham, 1988; Metcalfé, Abbott, Bray, & Exley, 1984). These studies have been conducted with the hypothesis that theatre may help to reach a person on a more personal and empathetic level, therefore increasing their memory of the situation and allowing the information to be more meaningful in the future.

The theatrical experience has been compared to and even used as a form of therapy (Drummond, 1984; Furman, 1988; McLeod, 1984; Kent & Carter, 1975; Sartre, 1976;

¹ Research performed under the direction of Dr. Amy Eshleman (Psychology).

Scheff, 1976; Scheff, 1981). This association implies that a deep emotional connection occurs between the material and the audience. The distance between the audience and experiences of the actor might aid the audience in encountering a balance between everyday occurrence and extraordinary experiences without threatening their mental health. In other words, a person can rehearse what they might do and feel if something detrimental occurred in their lives without leaving the comfort of their auditorium seat (Furman, 1988).

The power of an artistic performance has been further emphasized by Stein (2003), who stated that "...art, in the broadest sense, provides analogies to personal experience and in turn deepens that experience" (p. 84). He additionally noted that the arts are a wonderful complement to the elements of science. This suggestion that the arts and sciences can add to and enhance each other implies that theatre is an ideal teaching tool. The difference between simply teaching science in traditional ways and using the arts to enhance it is that the theatrical experience may be able to conjure emotions and reactions that traditional lectures lack, therefore increasing a person's awareness, education, and attitudes towards an important issue (Elliot, Gruer, Farrow, Henderson, & Cowan, 1996; Metcalfe, Abbott, Bray, & Exley, 1984). Theatre's novelty, liveliness, stimulation, and colloquial speech may aid it in being an effective educational tool. Although literature has explored and encouraged the use of theatre for educational purposes, few controlled, empirical studies have been conducted on the subject.

The AIDS epidemic is an issue that has become a significant concern for the United States, and schools and public officials regularly concern themselves with educating young people about this topic. Multiple studies have been conducted to examine the use of theatre in AIDS education as a means for decreasing risky behavior and reshaping attitudes of young people when it comes to this serious illness.

McEwan, Bhopal, and Patton (1991) structured a study by presenting a play and an educational workshop, both regarding AIDS, to British high school students. Approximately 3000 students viewed the performance and 800 took part in the workshop. Evaluations were collected before and after each program. The researchers examined knowledge, attitudes, intended sexual behavior, and multiple other factors. Significantly more students from the performance group believed both sexes were responsible for protecting themselves from AIDS, and 49% said they would change their behavior after the play. The performance group also displayed an increase in intended communication about AIDS and a higher concern they might contract AIDS. The researchers concluded that theatre should be used to influence emotional aspects of attitudes related to decreasing AIDS transmission.

Elliot, Gruer, Farrow, Henderson, and Cowan (1996) also tracked the success of theatrical AIDS education programs in British adolescents. Students were randomly

assigned to attend either a theatrical production or a health education seminar. The study experienced some pivotal problems, such as a large degree of attrition between each questionnaire and an unbalanced number between the seminar and the theatre group. The authors used a pre-test post-test measure to explore variables of knowledge, attitudes, and behavior regarding AIDS. The majority of the results were not significant, although a significantly higher percentage of 68% of theatre participants found the production interesting than the 46% who were interested in the seminar. Participants in the theatre group also responded positively to the everyday language of the production as well as the similar ages of the actors to themselves. The follow-up questionnaire given two months following each program also reported a significant difference between condom purchases in each group (34% of theatre participants reported an increase as opposed to 6% of seminar participants). Although this data does not necessarily report that theatre has a positive impact on AIDS education, problems with the study's organization may be to blame for this. Additionally, the data that were significant should not be discarded.

A similar study, also in the United Kingdom, was performed by Denman et al. (1995). The participants were all fourteen years of age and from various socioeconomic areas. A pre- and post-test was administered before and after a theatrical AIDS program with a workshop following the show. The majority of the children who participated enjoyed it and found it interesting and educational. The findings supported that the performance had at least a short-term impact on knowledge and attitudes relating to AIDS. Interestingly enough, students reported afterwards that they believed to a lesser extent than before that AIDS is universal and can affect anyone. This may be due to a downward social comparison (Festinger, 1954) on the part of the participants, who may believe that they would have behaved differently in the situation than the actors they are watching and therefore would have avoided becoming infected. It is worth exploring, however, whether comparing each of the multiple performances involved in this study is reliable. Since each individual program incorporated an interactive workshop, no two performances were exactly similar, making each performance a slightly different stimulus. Therefore, it may be problematic to compare results of these different sessions.

As sensitive as the subject may be, puppets did not seem to deter AIDS education and were reported to aid in public awareness of the disease. Skinner, Metcalf, Seager, de Swardt, and Laubscher (1991) performed a quite interesting study in South Africa using a street theatre puppetry show to educate the passing public about AIDS. There was a significant increase in knowledge, intent to reduce risky sexual behavior, and concern about getting AIDS.

Few of these studies, however, utilized random assignment between theatre and non-theatre groups, so there were very few true experiments. Therefore there is much conflicting research about the significance of theatre education of the AIDS issue. Also,

few of the previously reported studies were conducted in an urban American culture with college-level participants. McEwan et al. (1991) initially included college students in his study however their data were disregarded because of a poor response rate. These researchers' intention to include college-age participants further indicates that the age group is important in this research. This study therefore begged to utilize and explore this demographic. College students finding themselves in a dormitory and away from home for the first time are often susceptible to peer pressure and experimentation with risky behavior such as drug use and promiscuous sexual behavior. As past studies have hypothesized, theatrical methods in educating students about their risks and behaviors may be beneficial to their level of attitude change.

In addition to the awareness of this issue, this study also explores the stigma that some may hold towards people with AIDS. As previously stated by Probart (1989), tolerance towards people with AIDS is a part of and therefore directly related to AIDS education. Herek (Herek & Glunt, 1988; Herek, Capitanio & Widaman, 2003) has done extensive research on the subject, and his studies suggest that many people do indeed hold a stigma against people with the disease. His 1988 study suggested that this stigma is twofold, stemming from the idea that AIDS is a serious and sometimes misunderstood illness, as well as adding to the prejudice already held against devalued groups, such as homosexuals and drug users. His more recent study analyzed AIDS-related phone interview results from 1991, 1997 and 1999. The results indicated that 41% of participants in 1999 believed they could get AIDS from a public toilet, 12% supported extreme policies, such as mass quarantine, and over one-third reported that concerns about the public stigma against AIDS could affect their decision to be tested for the disease. Herek has reported that educational programs about AIDS are crucial to fighting these public stigmas.

Research has suggested some approaches to increasing empathy towards someone with a disability or who is part of another group of devalued people. Donaldson (1980) suggested that structured contact with affected people who have similar status to unaffected persons (including similar age or social status) could influence attitudes in a positive way. It is important that the individuals are credible and do not seem stereotypical so they may provide a powerful message to unaffected people and lead to positive attitude formations. She also proposed that several disabled people are more effective in changing attitudes than one. This then becomes a social situation that has been theorized by Allport (1954) to decrease prejudice. McKalip (1979) put forth that giving others the opportunity to examine their own beliefs and feelings could increase empathy. This can be done by presenting the similarities and differences between people and allowing them to be accepted.

Priming is another technique often used to influence participants' attitudes. The method has been explored in many studies by experimenters who are interested in the effects of presenting participants with a preliminary piece of information, such as suggestive word or phrase (Higgins, Rholes, & Jones, 1975; Rapp & Samuel, 2002). These studies have repeatedly shown that the mind will often develop a predisposition toward an attitude based on seemingly insignificant stimuli shown before an experiment. Wittenbrink, Judd, and Park (1997) related priming to prejudice when exploring participants' implicit and explicit feelings of discrimination. They noted that while participants did not display overt prejudice in a questionnaire, they did show signs of subtle, more unconscious prejudice in their ability to recall stereotypical words more easily for African Americans when primed with the word "black." This study therefore leads one to propose that if a prime can enhance a stereotype, it could certainly reduce it. Priming has been shown by literature to be a strong and controllable psychological process, so, following this behavioralistic logic, it should be possible to prime a participant for a multitude of measures, including the reduction of stigma against a group.

Based on this information and past research, the present study hypothesized that priming will affect participants in the present experiment in terms of their attitudes towards people with AIDS as well as their intended future protection from the disease. Rather than simply presenting an educational theatrical production, one of two priming questionnaires presented to participants beforehand were predicted to influence the way students view and ultimately interpret the information presented. Students who were primed with a survey consisting of AIDS-related information would therefore show more interest and knowledge growth from the performance than students primed with an unrelated questionnaire. Priming with an AIDS stimulus was expected be able to enhance theatre's powerful emotional stimulation and ability to alter attitudes further and provide the participant with an incredibly strong message of tolerance about people with AIDS. The results, however, revealed that the control-primed group, consisting of theatrical stimuli, was more profoundly affected by the performance.

II. Method

Participants

Participants in this study were undergraduate students at Wagner College, a small liberal arts school in New York City. A total of 80 students volunteered from a participant pool consisting of students in introductory psychology courses. Participants received partial course credit for participating in the study. Fifty-eight of these students viewed the performance and 22 students, in a control group, did not. The students were mostly Caucasian and from middle-class to upper-class background.

Materials

The two experimental groups attended a performance of scenes from the play *Elegies for Angels, Punks, and Raging Queens*, by Bill Russell. The show was cast with students and faculty from Wagner College. The play consists of monologues of AIDS victims and permits a large cast of diverse characters in addition to allowing flexibility of order and arrangement of the performance. To comply with McKalip (1979) and Donaldson's (1980) suggestions on increasing empathy, the scenes were selected to present characters of a balanced representation of age, sex, sexual preference, and method of AIDS transmission to allow for each member of the audience to encounter a personally relatable character. The scenes were also chosen to balance between comedic and dramatic monologues. The monologues are written in poetic form, which Rapp and Samuel (2002) suggest may aid listeners to anticipate dialogue and make the language more meaningful.

Two versions of a pre-show priming survey were used. One survey (AIDS prime) asked about the participant's view on AIDS and his/her susceptibility to the disease (See Appendix A). The other survey (theatre prime) questioned the participant about theatrical aspects of the performance (Appendix B). All theater going participants completed the AIDS-related post-performance survey concerning AIDS information and opinion questions. The questionnaire asked participants to report attitudes towards the performance, their anticipated protection against AIDS after viewing the performance, and included a social distance scale to measure the participant's level of stigma against persons with AIDS. A non-theatre control group did not view the show and completed a questionnaire identical to the post-performance survey, minus the questions directly related to the show.

III. Procedure

The study was submitted to and approved by the Wagner College Human Experimentation Review Board to ensure ethical treatment of all participants. Open auditions were held on campus to cast the play. The actors who were chosen to participate in the show viewed an educational AIDS video (Bassick, 1990) and participated in a discussion to enhance their knowledge of the subject and aid them in the preparation of their characters. The performance was held in a small studio space on the campus. Before the performance, the priming surveys were randomly distributed onto the audience's seats. The participants were held outside the staging area until shortly before the performance was to begin before they entered the space and chose seats, randomly assigning themselves to either one questionnaire or the other. The participants were instructed not to discuss the survey, and the performance began immediately after the participants completed their questionnaires in order to additionally reduce discussion.

The performance was approximately 35 minutes long with no intermission so as to not allow the participants to share information about their priming surveys. Immediately following the performance, the participants were given the post-performance questionnaire. Afterwards, a short debriefing was held.

Students who were not involved with and did not view the performance completed the control group survey in a psychology lab.

IV. Results

To test the hypothesis that exposure to theatre affects attitudes and that the type of prime affects theatre goers' attitudes, a series of Analyses of Variance (ANOVAs) were performed on each variable of the post-experiment survey by condition. Planned orthogonal contrasts compared the two theatre groups to the non-theatre control group and compared the two theatre groups to each other. In the ANOVA examining whether and to what degree participants viewed the issue of AIDS as a problem for them, there was a significant main effect of condition, $F(2, 77) = 4.23, p < .05$. The two groups who attended the theatre performance (AIDS prime: $M=1.86, SD=1.08$; theatre prime: $M=1.06, SD=1.00$) were more likely to report that AIDS was a problem for them than were the non-theatre control group ($M=1.00, SD=0.68$).

A social distance value was determined for each participant by finding the mean of their responses to questions regarding their expected comfort around a friend, neighbor, fellow employee, and roommate with AIDS, as well as their comfort regarding having someone with AIDS marry into their family. Although the ANOVA did not reveal significant results regarding the distance value as a whole, $F(2, 77) = 1.57, p > .05$, some of the aspects of social distance did produce interesting results.

For their comfort level of having a friend with AIDS, the control prime ($M=6.13, SD=1.20$) differed from the AIDS prime ($M=5.18, SD=1.74$) and the non-theatre group ($M=5.18, SD=1.77$). The theatre group reported more tolerance toward having a friend with AIDS than both the theatre prime and non-theatre groups. When asked to report their feelings of comfort towards having someone with AIDS live in their neighborhood, the AIDS prime group ($M=5.75, SD=1.76$) differed significantly from both the theatre prime ($M=6.60, SD=0.77$) and the non-theatre group AIDS prime group ($M=6.32, SD=1.21$). The AIDS primed group therefore showed less tolerance for living in a neighborhood with someone with AIDS than the theatre prime and non-theatre groups.

To test the hypothesis that the specific prime would affect how the theater-going participants would protect themselves against AIDS transmission in the future as opposed to protection before viewing the performance, I conducted a repeated measures ANOVA on protection behaviors before and commitment to protection in the future. The two prime groups did not differ in their behaviors before the performance, $F(1, 55) = 4.04, p <$

.05. While there was a significantly greater commitment to improving protective behaviors after the performance (AIDS prime before: \underline{M} =3.71, \underline{SD} =0.66; AIDS prime after: \underline{M} =3.71, \underline{SD} =0.66; theatre prime before: \underline{M} =3.62, \underline{SD} =0.73; theatre prime after: \underline{M} =3.86, \underline{SD} =0.35), this effect was driven by the increased commitment of the theatre-primed group (figure 1). There was a significant interaction between the prime completed and reported protective behaviors before and after the performance.

Students reported that they presently protect themselves from AIDS (by avoiding IV drug use, using safe sex...) the majority of the time (\underline{M} =3.70 out of a possible 4.00), and reported that they do not think AIDS is generally that much of a problem for them (\underline{M} =1.54 out of 4.00).

Theatre-going participants reported enjoying the show (\underline{M} =3.22 of a possible 4.00). They rated the quality of the acting (\underline{M} =8.81 of a possible 10.00) and the performance as a whole (\underline{M} =8.76) relatively high.

V. Discussion

The participants reported enjoying the performance a great deal. This supports the well-documented fact that students find theatre to be novel and enjoyable. Compliant with the hypothesis, the participants who saw the AIDS performance were more likely to report that AIDS is a problem for them than were the students who did not view the performance. This substantiates previous literature, assuring that theatre can be an effective teaching tool.

Although there were significant results that showed a difference between the two primed groups and the non-theatre control group, the results of the prime were actually in the opposite direction of the hypothesis. It appears that the theatre-primed group that was more emotionally affected by the performance showed the most positive attitudes after the show.

Although these results were initially surprising, they may be explainable through Katz's (1954) theory of the functional approach to attitudes. In this study, it is possible that the experiment caused participants to involve their value-expressive or their knowledge function of attitudes. The value-expressive function involves the participant trying to conceive that he or she has a positive self-concept. Knowledge function describes the standards or frames of reference that people need to understand the world. By presenting the AIDS prime, I may have inadvertently signaled to the participants that they were about to view something educational, therefore flagging the knowledge function and blocking the value-expressive function. The theatre-primed group was therefore experiencing the performance at a more emotional level than the AIDS-prime group.

Katz (1954) explained that the change of value-expressive attitudes can occur when

the participant experiences dissatisfaction with one's self-concept or associated values. This could have happened in this experiment. If participants previously held negative attitudes towards people with AIDS and then were able to relate to and enjoy characters they saw in the performance, they would need to change their values to reduce cognitive dissonance (Festinger, 1954) and maintain a healthy and positive self-concept.

To change a knowledge attitude, the attitude would have to deal with a new or ambiguous situation. This did not occur. The participants did not encounter any new or ambiguous information about AIDS from this performance, which was mostly emotionally based. The show was very successful and had 16 different characters giving well-delivered and touching monologues. However, there was little factual information about AIDS included in the play. Therefore, the participants did not have a reason to alter their knowledge functioning attitudes.

McEwan et al. (1991) suggested that theatre could specifically influence affective aspects of attitudes in his study. Probart (1989), on the other hand, hypothesized that theatre has the potential to touch both affective and cognitive domains of the learning process. It does not seem, however, that this path of research has been thoroughly explored. As was deduced from this study, theatre can invoke emotional responses, however when teamed with priming, a cognitive method of mental organization, the emotional stimulus was not as strong and did not affect the participant as profoundly. This aspect of theatrical education would be extremely interesting to pursue in future research.

A risk in a study such as this is described in Crandall and Feldman's (2004) study of prejudice, wherein people who are shown an example of negative behavior, such as discrimination, may then believe that they have less to worry about because of downward social comparison, in other words, they may think that they do not have to be aware of themselves and their behaviors because they are "better than that guy." I believe using relatable and diverse characters that were likeable and not stereotypical mostly avoided the dangers of this phenomenon. The majority of the audience encountered a likeable character of their own race, sex, age, and sexual preference. It is always possible that some participants saw some of the characters as being at fault for their disease and therefore concluded that they were not as at risk. It should be noted that AIDS affected all of the characters in the performance; there was no real villain or person who could be identified as having prejudice towards people with the disease. There was no one character for the audience to use in a downward social comparison to protect their egos. Students did, on the average, report protecting themselves the majority of the time from AIDS. It is possible that risky behavior is not as prevalent as in the past, but it is also possible that students were over-estimating their protective behaviors as to protect their self-image (Katz, 1954). If AIDS protection has increased in this age group, then the

participants could have viewed themselves as being more able to avoid AIDS than the characters. More research into this issue would be greatly beneficial to the field.

A shortcoming of the present study included surveys that could have been longer and more comprehensive in their content. Questions were only asked once and occasionally in a vague way, and I would be interested to recreate the present study using more examples of social distancing surveys and AIDS knowledge questions. It would be interesting to append the questionnaires to include more diverse questions about social distance, more specific questions about risky behaviors, and questions regarding participants' beliefs of whether people with AIDS deserve to have it because of their mistakes.

Future research might pursue any of multiple routes. It would be interesting to conduct further research into the balance between cognitive and emotional attitudes. The phenomena that took place here was interesting, and to master the balance between teaching a student both emotionally and cognitively could have benefits on the educational field. It would be interesting to continue studying priming in terms of theatrical education. Perhaps using a subtler stimulus along with primes could pinpoint whether a prime could enhance a less blunt theme. The play performed here was very AIDS driven. All of the characters had AIDS and AIDS was discussed at length. A play that perhaps had one character with AIDS and only hinted at stigma and AIDS knowledge would be a wonderful start for a study involving an AIDS prime aimed at getting participants to pay particular attention to the themes expressed by the individual character.

It is actually quite extraordinary to conclude that theatre may be able to alter attitudes well without the aid of primes or other psychological devices. Contrary to the hypothesis, we can conclude that the use of a cognitive AIDS prime is counterproductive to trying to reduce stigma and encourage positive behavior and attitudes regarding AIDS, however attendance to the performance did influence attitudes towards AIDS issues. More research on the issue will be required to fully conclude the effects of priming on theatrical education of AIDS.

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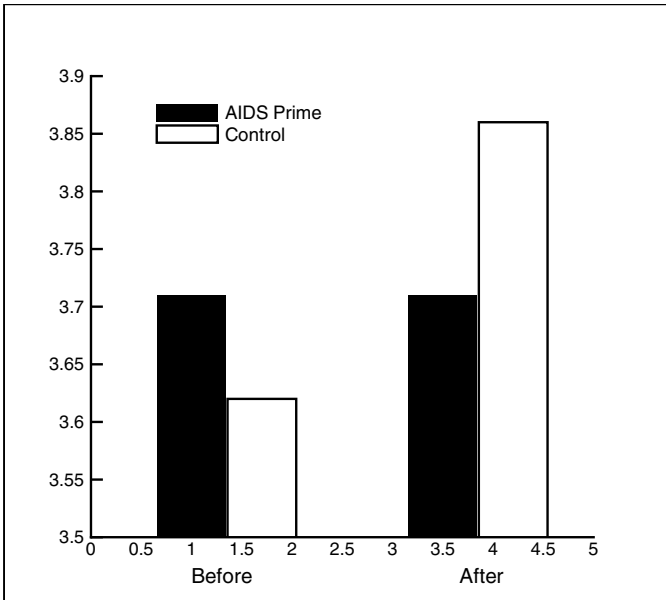


Figure 1: AIDS Protection Before and After Viewing Performance

Appendix A: Experimental Priming Survey

- How confident are you about your knowledge of HIV/AIDS?

- Have you ever encountered a person or fictional character affected by HIV or AIDS? Did your experience with this person or character educate you about the disorders or affect you in an emotional way?

- Do you believe that there is a particular demographic (a certain sex, race, or sexual orientation...) that is mostly at risk for AIDS? Is there a demographic that is barely at risk at all?

- How would you feel if a close friend of yours confided to you that he or she had AIDS?

- How at risk do you believe yourself to be?

- Do you think there is a stigma or prejudice towards people with AIDS?

Appendix B: Control Priming Survey

- How much experience do you have with the art of theatre, acting, and production of a play?

- Do you think that this space is beneficial or hurtful for putting on a production such as this?

- What makes an actor particularly convincing?

- What could hinder an actor's performance or make it less effective?

- What makes a piece of theatre memorable to you?

- How high are your standards or expectations for today's performance?

Labor Market, Earnings and Black-White Health Benefit Coverage

Lauren McMahon and Jonathan Ohn¹

This paper examines the relationship between labor market condition, annual earnings, and the percent of workers with no health benefit (insurance) coverage for both black and white workers for the period from 1985 to 2001. It tries to figure out which factors explain the difference and the change in health insurance coverage across race and gender over time.

Using the data from the Current Population Survey (CPS) and the Bureau of the Census database, we estimate a simple regression equation that shows the effect of unemployment rate, annual earnings, and education variable on the percent of workers with no health insurance coverage. Lagged explanatory variables are included to allow some time gap for these variables to start to show real impact, and the model captures the effect of last year's labor market condition, change in annual earnings, and change in workers with higher education on the percent of workers with no health insurance coverage of this year.

From the results, we find some interesting contrast between black and white workers. For the white workers, both male and female workers show a strong year-to-year persistence on the percent of no health benefit coverage. For the black workers, however, only female workers show such pattern. Controlling for the year-to-year persistence, the percent of no health benefit coverage for white workers is largely explained by the lagged unemployment rate (labor market tightness closely related to the business cycle). It implies that a tight labor market appears to be associated with a low percent of no health insurance coverage or a high percent of health coverage for a typical white worker.

Interestingly, however, the significant effect of labor market condition on the percent of no health insurance coverage is not found for the black workers. But instead, we find a significant effect of the change in annual earnings on the percent of no health insurance coverage for black workers, both male and female. Contrasting to white workers, the health insurance coverage for black workers appears to be sensitive to the change in their annual earnings (dominating the effect of labor market condition), or that the effect of the change in annual earnings is so significant for the black workers that it dominated the effect of the labor market condition (unemployment rate) and other

¹ To be presented at the Eastern Economic Association, NYC, March 4-6, 2005.

variables. Finally, although marginally significant, the higher educated black workers are more likely to get (or choose) health insurance coverage.

We take a closer look at the pattern of black-white earnings disparity for both genders in order to get some clue why only the black workers' health non-coverage is sensitive to earning change. We found that the black-white earnings ratio for female workers has been persistently decreasing during the 1980s and 1990s, from 97% in 1980 down to 86% in 1998 (with some recovery up to 91% in 1999). The earnings ratio for male workers, on the other hand, is well below 70% for most of the time except for the 1990s economic recovery. The ratio for male workers does not show a decreasing pattern, but is way too low compared to that for female workers. The persistently decreasing earnings ratio for females and a very low level of earnings ratio for male workers appear to explain why only the health care non-coverage for black workers is sensitive to earnings change, not to general labor market tightness.

Psychiatric Hospitalization: Is it Treatment or Torture?

Melissa D. Travostino (Psychology)¹

Many authors such as Thomas Szasz and Erving Goffman have agreed on the harmfulness of both past and current psychiatric treatments. The problem is that not much seems to have changed over the last fifty years, and only small reforms are being made. Some of the crucial aspects of hospitalization that writers have focused on as needing to be changed are the role of the mental patients themselves, the role of the therapist and/or psychiatrist, and the role of the institution as a whole. The reason for why these roles may be so important is because they all have an influence on the effectiveness of the patient's hospitalization, or how well it benefits the patient. This is important especially if a patient is forced into the hospital because if they spend time there and get nothing useful from it, it is only wasteful for everyone involved. This paper will discuss some of the faults of psychiatric care that authors have agreed on over almost the last fifty years, and compare them to what really goes on today as I have experienced it at my internship at South Beach Psychiatric Hospital. Additionally, emphasis will be placed on some solutions that can be used to improve the current situation.

I. Role of the Mental Patient

Those considered to be mentally ill were, and still are to some degree viewed and stereotyped by society as violent, dangerous, and uncontrollable (Dain, 1994 & Szasz 1987, 1995, & 2003b). Although this belief is not as strong as it once was, it still exists and is handled by forcing these threatening people into hospitalization. Although the unit that I was on at South Beach, and most of the others there, are strictly voluntary, there are some where involuntary patients can be sent. One in particular, is meant for those who were released from jail, but society would not be comfortable with having them free. Similarly along these lines, my supervisor and I discussed cases such as “the Son of Sam” case where those who committed crimes in conjunction with having a mental illness may never be released from a hospital.

Dain (1994) and Goffman (1961) discussed the stigmatization of mental patients even after they are released from the hospital. Goffman (1961) states that it may even be

¹ Research performed under the direction of Dr. Miles Groth (Psychology) in partial fulfillment of the Senior Program requirements.

difficult for former patients to get jobs. This sad fact was evident to me when one patient's employer called the unit to say she was "acting crazy" in front of customers. Another time, a young man came to the unit after quitting his grocery store job for being made fun of after telling his boss about his mental illness. One possibility to improve these kinds of situations is for psychiatrists to work with the public to raise awareness and alleviate stereotypes while at the same time working with patients on how to overcome and disprove stereotypes by doing the opposite of what people expect in the community.

What tends to be most frustrating about patients is their high level of dependence on others. As described by Goffman (1961) and Szasz (1994), what makes it worse is the fact that the level of restrictions in hospitals is so high. Therefore, patients are not allowed to leave the grounds to go do things on their own. On the Crisis Unit at South Beach, patients are allowed and encouraged to leave the grounds to run errands, get food, go shopping, visit family, go to work, and even look for places to live. The inpatient units however seem to be a different story where patients are only given privileges for the hospital grounds if they are good. Groups of patients will be walked by an aid outside to smoke, to eat, and to attend group sessions. When I asked what inpatients do there on weekends, I was told they sleep later, their families may come to visit, and groups of patients may sit and watch a movie or play a game. This sounds sadly more like daycare than treatment, and it is easy to imagine the patients waiting and hoping that their parents will come to pick them up soon. Once a patient has been in the hospital for a long period of time, Peszke (1975) and Szasz (1994) say the more dependent they become. This also seems to be true at South Beach where those patients who were there for many months had a difficult time getting motivated to leave.

Despite the fact that the Crisis Unit strongly encourages independence, I still saw a lot of what Szasz (1994) talks about. Patients frequently did not get out of bed on time, sat and watched television for most of the day, and collected money from the government that they use to buy whatever they want. One patient could be found listening to his newly purchased i pod and talking about buying a big screen television and a computer while he had no job or place to live. More evidence that patients are not quite being helped as well as they could and do not become independent enough to make good future choices is the fact that during rounds I heard about the same patients being readmitted again and again to other inpatient units (or repeatedly to the Crisis Unit at South Beach or even to other hospitals after living in the community). The institution as a whole should be working in conjunction with each of the individual units to prevent this pattern from occurring. Additionally, it should also be the duty of the outside clinics and therapists that see these patients regularly to try to better help them handle their problems rather than allowing them to run away from them by staying in the hospital.

Szasz (1987) discusses the idea that patients receive services from the psychiatrist and the hospital in general. This is also the belief at South Beach where patients are called “customers” rather than patients or clients. There is also a hospital administrator that sits in an office who is there to hear any complaints these “customers” may have about the hospital’s services or those who provide them. Their complaints are taken very seriously, and are often investigated if severe enough. Another way in which patients have recently gained some control over their treatment is just knowing what is going on in general. Goffman (1961) mentions that important pieces of information such as diagnosis and treatment plans as well as hospital stay lengths were kept from patients. For the most part this has changed and the patient can even have a say in it, but some things are still kept a secret at times such as discharge plans so that patients do not get angry and try to say they will kill themselves or do anything to jeopardize their release. Additionally, patients were not allowed access to their own money and were very limited on the personal belongings they were allowed to have on hospital units (Goffman, 1961). Today, at least on the fairly lenient South Beach Crisis Unit, patients are allowed just about anything except those items that can be used to injure themselves or someone else.

II. Roles of the Psychiatrist

It seems as though psychiatrists do more *to* people rather than *with* them. This is because their duties today are more similar to those performed by a regular doctor. Goffman (1961) and Szasz (1973) both agree that the psychiatrist has taken more medically related duties. Although this is also the case at South Beach, the reason does not seem to be related to understaffing as Goffman (1961) suggests. In this particular case, the reason seems to be that the patients have other people who do therapy with them, so the psychiatrist is just there to make sure their medication levels are as they should be and to see to it that all other medically related issues are taken care of. The psychiatrist does this by conducting at least weekly “interviews” with patients that can sometimes last for only about ten minutes. The types of questions that are asked vary greatly depending on what is currently happening with the patient. Then, when the interview is over, the psychiatrist writes a note about the status of the patient, physically and emotionally during the interview, and in their life in general at the time.

One aspect to the job of the psychiatrist that has become increasingly more and more important is the prescription of various medications. Before the 1950s, this was not even an option, and it is believed that since these medications started being used, the length of stay in mental hospitals decreased (Brill, 1975). At South Beach, I asked about the amount of people who were there that would remain there for life, and was told that there were not many due to advancements in medications.

Due to the fact that criminals who have completed their jail sentences are still being kept in psychiatric facilities, psychiatrists are obviously under pressure from society to be the ones to keep them safe. They are not only expected to do this, but they are also under a large amount of pressure to please a number of greatly differing parties. All at the same time, psychiatrists are supposed to be able to do what the patient, their families, society, the courts, and the hospital they work for wants. In order to do this, the psychiatrist is expected to find answers and explanations for problems, treatments that will work for each patient, solve people's problems (Szasz, 1973), be an expert on things like child raising and fixing marriages (Szasz, 1959), and even save lives by preventing people from committing suicide. Since the psychiatrist is only a human being and is not perfect, all of these things cannot be done and at least one of the groups that count on him or her will be let down. Unless we invent a flawless robot that can come up with solutions to these problems, we as a society need to learn to accept not having others fit the norms we would like to try to make them fit. Because we view psychiatrists as perfect people who give help all the time rather than need it, Farber (1958) makes an interesting point about psychiatrists needing support and validation from various sources since patients do not provide this for them since they are there to receive validation from someone themselves. This is why the team structure at a place like South Beach can be so important. In an environment such as this, all of the staff members are able to talk to and support each other as well as receive professional administrative advice from the director of the unit. This can probably also come in handy when a staff member is having trouble working well with a particular patient, and does not know how best to work with them.

III. Role of the Institution

Today, it is not only a mental hospital and the staff within it that contributes to the progress of a patient. There are now many assisted living housing facilities and outpatient clinics for the mentally ill to get help from staff members at their home when they have problems, and see a therapist regularly without going to the hospital. Although Szasz (1994) finds many faults with this newer development, much good has come of it. From hearing patients and staff talk about the problems with these facilities, I do see that there is a long way still to go in the way of improvements, however, it is definitely a step in the right direction. This type of out of hospital housing is meant to serve as a way for patients who are ready to leave the hospital but have only a little money for rent, and feel they are not quite ready to be completely on their own to try it out and have the liberty that Szasz stresses is so important. He talks about this housing as if patients do not want to be there however, all patients wishing to apply for such housing must fill out an extensive application as well as be interviewed by the staff at the facility. What becomes problematic is the fact that some of these facilities are in bad neighborhoods. The people

living there get their money taken from them and hence are not getting any assistance whatsoever.

Brill (1975) says that some of the problems society has with patients being released from mental hospitals are that the hospital does not prepare them properly to be released, they do not find them adequate housing, and they do not follow up on them. Some of the general improvements to the mental health care system that Brill (1975) lists however are that there are more of these outpatient clinics that are associated with local hospitals, and are located within the community where the mentally ill can go to meet with a therapist regularly and get assistance when they feel they need it. He also mentions that hospitals themselves are better staffed, which allows staff members to spend more time with patients and give them the help they need. He says that these factors in addition to the use of medication have all attributed to shorter hospital stays for patients. Also, at South Beach for example, patients must agree to the housing facility that they will be discharged from the hospital to live in. Then, as each patient is discharged, they are set up with a local therapist wherever they are going who can follow up on them. Another improvement that Brill (1975) mentions, is that patients are being taught more and more how to care for themselves. He says that emphasis is placed on issues such as nutrition by doctors (psychiatrists) and nurses so that patients will realize how important it is for them to eat properly for example. Furthermore, weekly programs such as the Healthy Living group I attended at South Beach work to teach patients how to maintain a healthy diet, exercise routine, good hygiene, and general lifestyle once they leave the hospital.

There are a few additional improvements I would like to suggest that are based on what I witnessed at South Beach. One of them is the practice of admitting people who have no insurance to the Crisis Unit for purely medical reasons. Someone with no insurance who needs to be seen by a doctor, dentist, or have tests done for example is actually *admitted* to the Crisis Unit. This means that the staff has to write notes about them, send them to their appointment, and discharge them once they are finished. All this work is done to admit someone to a psychiatric hospital for maybe an hour or two for medical purposes. This practice may have a tendency to get in the way of the staff on the Crisis Unit's ability to fully care for patients since they are sometimes busy taking care of these "patients" and the paperwork for them. My supervisor mentioned that she has previously tried to argue against this practice to the hospital administration, but it did no good. Another improvement that I would suggest is for institutions to work harder in teaching patients good alternative techniques in how to deal with their problems. It seems that since patients never learn this, they get scared when they are on their own in the community, so they end up coming back to the hospital as I saw at South Beach. There was one patient for example who had attempted suicide once after things in his life got too stressful. I suggested that if he did not learn some other ways to deal with the stress,

he would leave the hospital only to try it again as soon as something bad happened. It seems that the problem with a unit such as the Crisis Unit is that the psychiatrists and other staff members feel as though it is the job of the patient's assigned therapist only to make these kinds of decisions. It seems that unless they feel particularly strongly about a certain issue, they will not get involved.

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How Name Discrimination Can Occur in Resume Assessment

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This study investigates the issue of name discrimination during resume assessment. Twenty-eight Wagner College students participated in this study, a majority being white females. Each individual was randomly assigned four resumes to evaluate. The first condition included two qualified candidates: white female and African American female, and two non-qualified candidates: African American male and white male. The second condition was similar but included a qualified African American male and a non-qualified African American female. The qualified white female was marginally more likely to be hired than the strong African American candidates. The African American male candidate had significantly higher ratings when he was a stronger candidate as opposed to a weaker candidate. Within the weak candidates, African American candidates were rated more positively than the white male candidate. This study suggests that a qualified white woman and qualified African Americans will not face discrimination in the workplace based solely on the name on their resume.

I. Introduction

Racial discrimination against African Americans in the workplace is influenced by three factors: the history the U.S. has had between African Americans and whites, biases, and stereotypes. Stereotyping is a factor of racial discrimination in the workplace. A person's sex and race have been characteristics that society uses to judge or predict a person's worth, competence, or how a person will conduct himself or herself. With little information about an applicant, an interviewer may rely on stereotypes, which can lead to racial discrimination in the workplace (Kacmar, Wayne, and Ratcliff, 1994). When no job-relevant information is available, such as work experience and education, decisions can be made by stereotypes rather than on the individual's abilities.

Kacmar et al. (1994) studied the effect of relevant information versus no relevant information provided in assessments and hiring decisions. Participants were given the same applicant's job application and resume that were pre-tested to be viewed as neutral according to gender or race. Next, participants were randomly assigned to view

¹ Research performed under the direction of Dr. Amy Eshleman (Psychology).

one of four tapes, all similar in interviews (questions remained the same, responses were standardized, interviewees' clothing was similar across interviewees). The only differences in the four videos were the applicant's race and gender. Lastly, participants were asked to rate the applicants on how qualified they felt the applicant was, how skillful he/she was in certain areas associated with the public relations representative position, and whether or not they would hire the applicant for the position. The researchers found that when provided with job-relevant information, African American candidates were more highly evaluated than when no information was provided. With job-relevant information, African American candidates received the highest evaluations of all applicants, had the most confidence by the decision maker in the selection of the candidate, and were seen as most qualified by the decision maker. However, these ratings did not result in hiring decisions for African American candidates. Although having job related information on an African American candidate improved their ratings, these ratings did not turn into hiring decisions. The researchers observed that there were no significant differences for gender or race in hiring decisions. This may mean that decision makers are able to recognize a qualified African American candidate but will not follow up with job opportunities.

Stereotypes are formed usually because of a lack of knowledge about a different group, as seen in social psychology's complexity-extremity theory. Jussim, Coleman, and Lerch (1987) researched complexity-extremity theory on how stereotypes influence in-groups' and out-groups' views on individual members. Complexity-extremity theory focuses on how people of the in-group evaluate themselves differently from those of the out-group. Most people have more contact with those of their in-group and are able to produce a wide range of dimensions to characterize individuals within the group. By using many dimensions to evaluate a target, the target could be viewed as having favorable or unfavorable characteristics. With fewer dimensions that a person is familiar with of an out-group, extreme evaluations are more likely to occur, and targets of the out-group are more likely to be seen as extremely positive or negative. For example, Jussim et al. (1987) refer to a study by Linville and Jones (1980) where whites evaluated individual blacks with fewer and more extreme dimensions than when evaluating individual whites.

Jussim et al. (1987) found that an upper-class-appearing, Standard-English-speaking African American applicant was rated much more favorably than a similar white applicant confirming complexity-extremity theory. Low social economic status and nonstandard dialects were considered unfavorable traits. Jussim et al. (1987) believed that complexity-extremity theory suggested that evaluations of African Americans made by whites would be polarized when compared to their evaluations towards whites. This led to their polarized-appraisal hypothesis that whites would evaluate the upper-class-

appearing, Standard-English-speaking African American applicant extremely favorably and even more so than similar whites while the lower-class-appearing, Non-Standard-English-speaking African American applicant would be evaluated less favorably than similar whites. The latter part of the hypothesis, however, did not have ratings significantly lower than that of the similar white applicant.

Also, the range between the least and most favorably rated African American applicants was significantly larger than the differences between white applicants. Complexity-extremity was found to apply only for targets that had positive or negative extreme characteristics and not those who fell in between. In summary, complexity-extremity theory is the use of stereotypes because the person is unfamiliar or does not have enough information on another group, which at times may benefit the out-group if they possess extremely positive qualities because they will be magnified in the in-group's view. As shown above with the lower-class-appearing, Non-Standard-English-speaking African American applicant, those of the out-group with qualities that are perceived as negative will continue to be viewed as unfavorable but also somewhat equally unfavorable as similar whites. In relation to my study, participants are given a clue as to the applicant's race with the name provided. If the participant is able to associate an applicant's name to a certain group, complexity-extremity theory may occur depending on the types of groups with which the participant has been familiar.

Expectancy violation suggests that when an individual characteristic is present that does not fit the expected stereotype, the person is evaluated extremely in the way of the expectancy violation. This means that those who have favorable characteristics that were not expected would be evaluated more positively than those with the same characteristics that we already expected them to have, and those with unfavorable characteristics that were not expected would be evaluated more negatively than those who had the same characteristics that we already expected them to have. The expectancy violation theory may result in reverse discrimination. With a choice between a qualified African American applicant and a qualified white applicant, the African American applicant may receive better evaluations than the white applicant (Jussim et al., 1987).

The study by Jussim et al. (1987) concluded that stereotypes sometimes lead to favorable evaluations of certain out-group. The results of the Jussim et al. (1987) study provide insight into how African American applicants' resumes are assessed. It is possible that hirers who use stereotypes can sometimes lead to favorable review of certain out-group members. For example, as seen in the Jussim et al. (1987) study, whites have strong expectations of African Americans' social class, if a white hirer finds that an African American appears to be of low social class but unexpectedly spoke standard English, expectancy violation may come to play leading to a favorable view of this out-group individual.

Stereotypes about a person's sex or race affect the way others perceive a person. In a study by Tomkiewicz, Brenner, and Adeyemi-Bello (1998), white male and female managers responded to questionnaires about stereotypical characteristics of African Americans and whites, and then characteristics of good managers. Tomkiewicz et al. referred to a study by Terpstra and Larsen (1980) who suggested that numerous jobs are stereotyped in accordance to race—African Americans are abundant in entry level positions with far lower numbers of African Americans above middle management. What Tomkiewicz et al. addressed whether African Americans are perceived as not having the characteristics necessary to take managerial positions. The hypothesis was that whites would perceive characteristics of a successful middle manager matched more with stereotypical white than stereotypical African American characteristics. The researchers confirmed their hypothesis finding that the surveys revealed that good managers had more characteristics that matched stereotypical characteristics of whites.

Subtle discrimination is mentioned by Tomkiewicz et al. (1998), where they referred to Ilgen and Youtz's (1986) concept of subtle discrimination as a behavior seen within organizations labeled as "treatment discrimination." Ilgen and Youtz (1986) further explained treatment discrimination saying that middle managers are the ones who select those who move to upper levels of business. If middle managers see African Americans as not having the correct management characteristics, their chances of promotion are limited. Tomkiewicz et al. (1998) predicted that because white men are usually the ones to make decisions about hiring or promotion, African Americans may find it hard to overcome these stereotypical perceptions.

Racial discrimination in the workplace can also be due to biases by the interviewer. According to Marshall, Stamps, and Moor (1998) cognitive response theory is an automatic response that can explain how biases in pre-interview impressions impact how the interviewer assesses the applicant. By meeting an applicant, most people automatically recognize the person's race and sex. People often automatically respond to demographic information, physical appearance and non-verbal behavioral cues that impact evaluation without the interviewer knowing. Interviewers often form pre-interview biases or favor someone similar to themselves. Because of this, subtle discrimination can occur such as African Americans may be seen as more acceptable for job positions in which there is little face-to-face customer contact.

Marshall et al., (1998) have researched pre-interview biases and found that this exists but that it also depended on the interviewer's own race. Their study included participants from evening and Executive MBA programs with a majority of them having had work experience (mean number of nine years). Participants were given information on two well-qualified job applicants differing only in physical attractiveness. Two job types included either having to deal with extensive interaction or minimal interaction

with clients. Overall, they found a lack of interaction with job type and race. This implied that the job type was not a consideration when impressions were formed on the applicants' race or attractiveness. According to the researchers, they believe that because whites are making the hiring decision in a majority of professional selling jobs, it is the "supply side" rationale as to why there are low numbers of African American salespeople, and that the sales sector is open to hiring African American applicants as long as they are qualified (Marshall et al., 1998).

Also in this study, according to the researchers, it was revealed that there were feelings of racial identity for some African Americans that explain biases towards an interviewer's own race. The researchers attempt to explain that the reason may be because African Americans may want to help other African Americans to succeed, therefore influencing their hiring decision. However, the experimenters emphasize that they found no preinterview bias from white participants toward white applicants or against African American applicants.

The studies mentioned above have explored whether or not there exists employment discrimination against age, sex, appearance, or race. The present study intends to look at how a person's name may be linked to a certain race or ethnicity that can hinder a person's chance of obtaining a job as a result of racial discrimination. The study will examine race discrimination in job applicant screenings not by an interview, but discrimination by a name on a resume. With a number of the African American population with unique "African American" names like "Shaquille" and "LaToya" it may be easy to discriminate by looking at a name in a circumstance with limited additional information about the individual (Kacmar et al., 1994).

Despite the movement of society toward the acceptance of integrating the workforce, according to Marshall et al. (1998) who believes that the sales environment is open to African Americans and the goals intended by affirmative action programs, there still exists subtle racial discrimination. By meeting an interviewee, the interviewer automatically forms opinions about the person and a person's race and sex are visual aspects that can be easily recognized. A person's race can be linked to stereotypes as seen in Terpstra and Larsen (1980), in which some interviewers were more likely to hire an African American person for a low status job, and a white person for more high status job. Eliminating the interview and basing hiring solely on resumes may not be a solution to eliminating racial discrimination because many names provide hints as to a person's race. I predict that name discrimination does exist and can lead to subtle racial discrimination in the workplace. Names can reveal a person's race, which can automatically lead to grouping the individual into a certain race. Stereotyping can lead to subtle racial discriminations in which African American applicants are associated with a

lower social class or having other traits not fitting with the job description and therefore fewer hiring decisions in favor of African American candidates.

II. Method

Participants

Participants were selected through the Wagner College Introduction to Psychology Participant Pool, where college students voluntarily participated in the study for class credit. There were 7 males and 19 females, ages ranging from 18 to 20 with a mean age of 19. The ethnicity of the participants included 71.43% Caucasians, 10.71% African Americans, 10.71% Latinos, 3.54 % Middle Eastern/Arab (one participant declined to state). After obtaining informed consent, participants were randomly assigned to one of two conditions.

Materials

Two packets were compiled for this study. Both packets contained instructions, demographic information to be completed by the participants, and a memo that instructed the participant to evaluate resumes for a human resources position. Following the memo in both packets, were a series of resumes and evaluation sheets. Lastly, in the packet was a list for the participants to record the three top candidates to be considered for a hiring decision in order from strongest to least strong candidate. The difference between the first packet and the second packet was that in the first packet the resumes included a qualified woman with a “white” name, a qualified woman with an “African American” name, a less qualified man with an “African American” name, and a less qualified man with a “white” name. The second packet contained resumes from a qualified woman with a “white” name, a qualified man with an “African American” name, a less qualified woman with an “African American” name, and a less qualified man with a “white” name. The first packet can be found in Appendix A. The difference between the first packet and the second packet is that Shaquille Jackson’s name appears on the third resume which LaToya Honda’s name appears on the fourth resume.

Procedures

Provided in both packets were instructions that asked the participants to read everything in the packet, to answer questions as honestly as possible, and when finished, to submit the packet to the experimenter.

Participants were asked to read a memo that informed them about a company’s open human resources position that needed to be filled and the qualities the company was looking for in the candidates. Next, they were to read each resume and complete a rating

questionnaire after reading each resume. Finally, they were asked to list the top three candidates that should be hired in order, with the strongest candidate listed first.

When the participant completed the activities in the packet they returned the packet to the experimenter. Each participant was individually debriefed verbally outside of the room by the experimenter and given a debriefing script for their own reference.

III. Results

According to the results of the study, my hypothesis of racial discrimination towards resumes with traditional “African American” names is refuted. When qualified, the African American female rated slightly better than the qualified white female in the first and second conditions. Within qualified candidates, the African American male applicant followed behind the females in ratings. As for nonqualified candidates the African American male rated better than the African American woman followed by the nonqualified white male in both conditions. Table 1 presents the means and standard deviations of ratings for all candidates in both conditions.

Comparing candidates across conditions, the only significant difference occurred when the African American male was presented as more or less qualified. The African American male was ranked more positively when he was presented as a stronger candidate than when he was presented as a weaker candidate, $t(26) = 2.06, p < .05$.

The qualified white female was not rated significantly different than either of the two strong African American candidates, $F(1, 24) = 0.46, p > .5$.

Interestingly, when comparing the two weak African American candidates to the weak white male candidate, the African American candidates were rated more positively than the weak white candidate, $F(1, 26) = 12.77, p < .01$.

When ranking the candidates according to first and second choice candidates, it was found that across both conditions the qualified white female was chosen 31 times for the first or second choice candidate while the African American female was chosen 14 times when she was a strong candidate and the African American male was chosen 13 times when he was a qualified candidate and once when he was not qualified. Participants were marginally more likely to select the qualified white female candidate as one of the top two candidates than they were to select either of the two African American candidates, $\chi^2(1, N = 49) = 3.45, p < .10$.

IV. Discussion

According to the findings of this study, my hypothesis, which stated that name discrimination can lead to subtle racial discrimination, was not fully supported. When rating both qualified male and female African American candidates with the white qualified female candidate, there was no significant difference. This finding could be

interpreted as hirers are not discriminatory towards females, race, or both, if they are qualified. However, the qualified white female candidate was marginally more likely to be chosen as one of the top two candidates to be hired than the two qualified African American candidates of both genders. Hirers may see no reason why not to hire a qualified white female, as long as her qualifications are not questionable.

The only significant difference that was found was that the African American male received significantly higher ratings when he was a stronger candidate than when he was a weaker one. These results confirm Kacmar, Wayne, and Ratcliff's (1994) findings that higher evaluations were given African American candidates when job-relevant information was given than when it was not. However, unlike Kacmar, Wayne, and Ratcliff's (1994) hiring findings where ratings did not transform into hire decisions, there was only a marginal difference between hiring either of the male or female African American candidate and the white female candidate. A concern over these findings however, is that the African American female was manipulated during the experiment similarly with the African American male candidate (first condition: qualified African American female, non-qualified African American male; second condition: qualified African American male, non-qualified African American female) using the same qualified and non-qualified resumes in both conditions, the African American female should have had the same significant difference in ratings. This did not occur, and perhaps gender plays a role in this finding. Future studies on this issue should employ three conditions. The first condition being a qualified African American male with a nonqualified African American female, the second condition being a qualified African American female with a nonqualified African American male, and a third condition being the qualified resume and nonqualified resume with names omitted. This will allow us to average the differences between qualified and nonqualified African American male and female applicants and compare it with the average difference between the qualified and nonqualified resumes with omitted names.

Participants also tended to rate the weaker male or female African American candidate higher than the weak white male applicant. Future research should explore why the white males was judged more harshly than other less qualified candidates. What the participant expects of certain groups, in particular what he or she expects of African Americans and whites in this study, may influence how the participant rated the candidate. With a more in depth study of this finding, we may find more support for complexity-extremity theory. As Jussim, Coleman, and Lerch (1987) found that the lower-class-appearing, Standard-English-speaking African American applicant was rated much more favorably than the similar white candidate; participants may have expected that a white male candidate should be most qualified. When he did not adhere to the

participant's view of what a white male candidate should be, he was judged extremely unfavorably, which can be further support for expectancy violation.

A problem of the study was the resumes that were the center of the study. The two good resumes and the two bad resumes were roughly equal in qualifications but also had slight differences in each of them. The first nonqualified resume (the one assigned to the African American candidate) contained misspellings, the use of "I", and no dates referring to employment. The second nonqualified resume (assigned to the white male candidate) was written with a cursive font, did not fill an entire page, and listed less work experience. These were six characteristics that were found in badly written resumes according to the Wagner College Career Center and therefore were divided between the two nonqualified resumes. However, participants may have been more likely to notice the length and the cursive font that was used for the white male candidate than they were to notice that the nonqualified resume of the African American candidate had misspellings and the use of "I". In the future, I would suggest four conditions. This would include the two conditions in this study plus the third and fourth condition in which the first qualified resume is assigned to a female or male African American candidate, respectively, instead of the white female candidate as it has in this study. The second qualified resume is assigned to the white female candidate, which was assigned to the qualified African American in this study. The third nonqualified resume is assigned to the white male candidate, which in this study was assigned to a nonqualified African American. Lastly, the fourth nonqualified resume is assigned to a female or male African American candidate, respectively, which in this study was assigned to the nonqualified white male. These conditions compared with the result of this study will allow us to see if it is the resume or the name placed on resume that makes the candidate effects ratings and hiring of the candidates.

According to the debriefing, when asked by the participants about their thoughts on the experiment many revealed that they did not notice or think about the name of the candidate. One person in particular thought that the order of the candidates influenced her hiring decisions. In a future study, random order of the resumes should be considered.

Because the number of the participants was so small, a majority being white females, I was not able to find whether or not race or gender was correlated with hiring decisions. For future studies, a wider range of participants of various genders and ethnicities will be encouraged to participate. The use of participants that work in business or even participants who are business majors would also be useful for future studies. Business students or business employees may look for specifics in a candidate necessary for the business world whereas undergraduate liberal arts students may not know what businesses look for in their employees. Hirers should be aware of this study and the others mentioned in order to hire qualified workers without being biased by stereotypes.

V. References

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Appendix A: Sample Rating Form for Reviewing Candidates

Instructions: Please be as honest and open as possible in answering each of the questions asked. We are interested in your true thoughts and feelings. Also, please do not skip any of the questions asked. Please remember: (a) to read the memo and to read all resumes very carefully, (b) not to skip any questions, (c) to turn in the completed materials to the experimenter.

MEMORANDUM

TO: Christina Mayer, CFO
FROM: Janet Camp, President
RE: Search for V. P. of Human Resources
DATE: October 21, 2004

I understand that you will start screening applicants for the Human Resources position in the very near future. In doing so, I want you to keep these things in mind:

- (1) We must have someone with experience and involvement in community service and programs.
- (2) It is time to create a more professional human resources function. I want a person heading it up who either has an advanced degree in business or other related fields to human resources or any other advanced degree that would enhance the skills the person would use working at Silliman's Recreation and Community Center.
- (3) We need a person in the VP position that will be able to have a good relationship with our staff. This will require experience in management and supervisory skills with the staff.
- (4) The applicant chosen must also be able to create program and activities for everyone in the community, both children and adults.
- (5) The applicant chosen will be expected to present proposals to staff and executives for approval. The chosen candidate will also need to be somewhat publicly known in the community, and will need public relations skills to interact with the community.

I think that we should proceed as we typically do in these matters. Since you oversee Human Resources, you should go ahead and choose three people to interview from the Pre-Screened Candidate List. After the interviews, make the decision whom to hire. Keep in mind; I want someone with experience and an advanced degree.

KATE ROBERTS (applicant 1a)
1200 Michigan Drive
Courtland, NV 89014
(415) 616-5003

Objective: Position as program director/coordinator/advisor, human services setting

PROFESSIONAL EXPERIENCE

Management & Program Coordination

- Chaired organizing committee for a major retirement event for University Vice President.
- Initiated highly successful Wellness Program at University:
- Completed needs analysis; researched potential programs
- Designed program to respond to expressed needs
- Conducted first annual Health Fair designed to increase stress-reduction techniques
- As Budget Assistant, interpreted policy and monitored \$400,000 discretionary fund for compliance with fund guidelines.
- Revitalized a Sierra Club outings program, doubling participation by recruiting, training and motivating leaders, and initiating an effective advertising program.
- Followed through to assure that corrective action was taken on problems over the planning or program coordinating process.

Staff Development & Supervision

- Coordinated and supervised major project of assembling information packets and brochures to promote the specified programs, and distribution to students, faculty, staff, and alumni:
- Assisted manager in determining content of packets
- Supervised two clerks assembling materials
- Arranged for printing, Xeroxing and distribution
- Trained, supervised & evaluated staff, enabling them to improve skills and achieve work objectives.
- Directed alumni/community/students relations committee, which serves as the liaison between students with available job opportunities and mentors in their interested field.

Written & Verbal Communication

- Conceptualized and wrote descriptive brochures on the Division of Agriculture and Natural Resources.

- Developed extensive, quality network of people resources for Division of Agriculture and Natural Resources.
- Organized and conducted numerous meetings & retreats of association boards and clubs.
- Delivered program status reports before 50-member national Sierra Club committee, successfully persuading officials to continue support of a threatened program.

Public Relations

- Participated in development of an external relations and governmental relations program for the Division of Agriculture and Natural Resources.
- As Information Specialist, educated general public on specific park regulations, policy regarding wilderness use, and environmental quality.
- Spearheaded planning of conferences and educational tours for Cooperative Extension.

Fundraising

- For six years, organized volunteers and assisted in planning fund-raising events for the University Art Museum.
- Assisted in the identification of corporate and family foundation prospects for a \$500,000 capital campaign for Cooperative Extension
- Reviewed direct-mail solicitation copy.
- Represented the Division of Agriculture & Natural Resources, filling in for supervisor at UN Development Officers’ meeting; participated in University –wide Development Study requested by the Office of the President.

WORK HISTORY

- 7/03-present **Space Planning Assistant** Budget & Space Planning, University of Nevada
- 2002-2003 **Special Projects Analyst** External Relations, Div. Of Agric. & Natural Resources Office of the President, University of Nevada
- 1999-2002 **Budget Assistant** Budget & Space Planning, University of Nevada
- 1994-2001 **Administrative Assistant** President’s Office, University of Nevada
- 1992-1994 **Computer Coder/Editor** Reilly Marketing Research Corp. – San Francisco
- 1991-1992 **Information Specialist** US National Parks Service, Yosemite National Park

CURRENT COMMUNITY LEADERSHIP

Elected to Board, University Art Museum Council
Elected Sub-Committee Chair, Sierra Club National Outings
Leader for Sierra Club National Outings

EDUCATION

B.S., (Honors) Conservation of Natural Resources – University of Nevada, 1991
M.A., Human Relations – California State University San Francisco, 1994

LaToya Honda (applicant 1b)
444 Luella Drive
Woodside, CA 94602
(415) 518-2929

Objective: Position in administration or human resources emphasizing analysis, planning, writing, problem solving

RELEVANT EXPERIENCE

Research/Assessment/Evaluation

- Analyzed bills and directed advocacy efforts on state legislation pertaining to public schools, housing, church-state, and religious issues.
- Participated in fact-finding missions to Israel, Romania and Poland to determine fundraising and social planning needs and strategies.
- Developed policy for community action in response to Ethiopian famine and Soviet human rights issues, involving on-site research and data gathering missions.
- Identified and catalogued credible African relief organizations in California for contributor reference.

Program Design/Development

- Designed stress management programs for a variety of groups:
 - new parents with high risk infants;
 - pastoral counselors, in a burnout prevention program.
- Created a highly successful program for hospital chaplains which dramatically decreased on-the-job stress (still in operation 5 years later)
- identified and interviewed the potential participants located at 39 hospitals;
- designed a program addressing 3 primary concerns uncovered in the survey, namely: training and education, clarification of values, and burnout prevention;
- developed a program budget and submitted it for approval;
- designed evaluation tools to assure staffing and program effectiveness.
- Planned, developed and established three new human service projects for County Board of Supervisors; all three still successfully operating.
- Redesigned format for annual meeting of a national organization; facilitated processes during the meeting. Three-year outcome: greatly increased member participation.

Program Coordination & Supervision

- Coordinated implementation of the above chaplains' program:
- engaged guest speakers on grief and death, drugs and alcohol, etc.;
- scheduled and led 1-day retreats focused on clarifying values;
- coordinated and led counseling support groups; facilitated informal networking;
- provided opportunities for refresher courses;
- developed a referral system covering days off and vacation
- Served as consultant to Marin County public schools on curriculum development, minority rights, and church-state separation.
- Designed and implemented educational workshops for Marin County on public affairs issues, overseeing: invitations, site, speaker procurement, press releases, and follow up.
- Directed staff of 4-30, including counseling, support, security, and clerical personnel in several work environments: school, counseling center, community treatment centers, and business.

Writing/Speaking/PR

- Spoke before large audiences on a variety of domestic and international issues.
- Conducted successful public relations meetings on a controversial school subject, greatly increasing parental support of the program.
- Published articles in Northern California Community Bulletin (20,000+ circulation).
- Appeared on numerous radio and TV programs, addressing human rights issues.

Presentation/Communication

- Developed highly effective presentation outlining results of a work productivity study, contribution to the adoption of over 80% of my recommendations.
- Served consistently as study team's preferred presenter, delivering all team briefings to top management, using audio visual aids.
- Delivered informational talks on study results and newly adopted procedures, to: employee groups, administrative units, office personnel, and managers.

WORK HISTORY

2000-present	Senior Associate	CENTER for LOCAL & COMMUNITY RESEARCH, Oakland
1997-2000	Executive Director	THE CENTER, Pleasanton Counseling, Education and Crisis Services
1996-1997	Grief Program Coordinator	ST. ROSE HOSPITAL, Hayward

Shaquille Jackson (applicant 1c)

92873 Main Street • Minneapolis, MN 55404 • 612-555-5555 • sjackson@yahoo.com

OBJECTIVE

I would like a position in Human Resources to be a Development Manager for an educational institution.

EXPERIENCE

University of Minnesota Minneapolis, MN
Manager, Center for Human Resources Development

- I supervised a professional staff of 35 and my support staff included 15
- I designed and implemented a new online system of training opportunities
- I, also, improved customer service approach of the department; customer satisfaction improved 30% in 2 years
- I created a formal Work-Life Initiative for employees
- Lastly, I provided professional consultation for academic departments

University of St. Thomas St. Paul, MN
Manager, training and Development

- I implemented a new training program for my company's staff
- I have conducted workshops and orientation programs for new employees
- I've marketed training services to department chairs and supervisors
- The University's President awarded me with the Service Award

Coe College Cedar Rapids, IA

- I researched, designed and implemented new employee orientation program
- I also revised and presented numerous workshops to employees

EDUCATION

University of Iowa
Iowa City, IA
• B.A., Business Administration

Nicholas Thomas (applicant 1d)

Objective: *Administrative position in Personnel and Human Resources*

PROFESSIONAL EXPERIENCE

COUNSELOR, *Group Processes (counseling center), Oklahoma City. 1991-2001*

- *Counseled individuals to identify personal objectives & develop strategies for attainment.*
- *Counseled youths and adults in group and individual sessions, focusing on problem solving and crisis resolution.*

ADMINISTRATIVE ASST., *Nomura Securities International, San Francisco. 2001-present*

- *Developed strong liaison network with staff in various SP departments, subsidiaries and banks, to effectively resolve financial/operational problems.*

EDUCATION

BA, SOCIOLOGY, MICHIGAN STATE UNIVERSITY, 1991

Example Evaluation Form

Rating of Referral -

Please circle the one number below that best indicates the quality of the candidate as a potential hire.

1	2	3	4	5	6	7
Excellent Referral	Very Good Referral	Good Referral	Acceptable Referral	Poor Referral	Very Poor Referral	Should not have been referred

Please circle the one number below that best indicates candidate as having experience or involvement in a community type setting.

1	2	3	4	5	6	7
Excellent Referral	Very Good Referral	Good Referral	Acceptable Referral	Poor Referral	Very Poor Referral	Should not have been referred

Please circle the one number below that best indicates candidate as having the proper education for this position.

1	2	3	4	5	6	7
Excellent Referral	Very Good Referral	Good Referral	Acceptable Referral	Poor Referral	Very Poor Referral	Should not have been referred

Please circle the one number below that best indicates candidate as having the proper management and supervisory skills for this position.

1	2	3	4	5	6	7
Excellent Management Skills	Very Good Management Skills	Good Management Skills	Acceptable Management Skills	Poor Management Skills	Very Poor Management Skills	Has no Management Skills

Please circle the one number below that best indicates candidate as being able to create and coordinate programs and activities for people in the community.

1	2	3	4	5	6	7
Excellent Program Directing Skills	Very Good Program Directing Skills	Good Program Directing Skills	Acceptable Program Directing Skills	Poor Program Directing Skills	Very Poor Program Directing Skills	Has no Program Directing Skills

Please circle the one number below that best indicates candidate as being able to make presentations and speak in front of large audiences.

- | | | | | | | |
|-------------------------------------|-------------------------------------|--------------------------------|--------------------------------------|--------------------------------|-------------------------------------|----------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Excellent
Presentation
Skills | Very Good
Presentation
Skills | Good
Presentation
Skills | Acceptable
Presentation
Skills | Poor
Presentation
Skills | Very Poor
Presentation
Skills | Has no
Presentation
Skills |

Table 1: Overall Rating For Each Candidate in Each Condition

	White Woman	Black Woman	Black Man	White Man
Condition 1: Strong black female candidate	2.04	1.94	3.65	4.42
Mean (Standard Deviation)	(0.64)	(0.71)	(0.82)	(1.06)
Condition 2: Strong black male candidate	2.35	4.24	2.21	4.51
Mean (Standard Deviation)	(0.52)	(0.77)	(0.99)	(1.32)

Section III: Critical Essays

The Destruction of Hiroshima: The Decision to Drop the Bomb

Alla Bronskaya¹

On August 6, 1945 at 2:45 a.m., a B-29 bomber nicknamed *Enola Gay* roared off a landing strip on a tiny island named Tinian. On board it carried a 10,000 pound secret nicknamed “Little Boy.” At 8:15 a.m. the bomb bay of the plane sprung open and dropped its mystery cargo onto the city of Hiroshima, where families were enjoying peaceful breakfasts and children were preparing for school. As the B-29 sped away, a blinding flash filled the air as a ball of fire, 1800 feet across with the temperature of 100 million degrees at its center, replaced the waking city. Children who survived the attack recall seeing people “so badly burned that the skin of their body was hanging from them like rags” (Gardner 149-150). Today, there are approximately 350,000 survivors of the two atomic bombs dropped on Japan, and their life has been a “living hell to this day, filled with constant fear of radiation disease, death, and anxiety over passing genetic problems on to their offspring” (Sodei 1120). The instant that the bomb bay of the *Enola Gay* sprung open, a new age of warfare had begun. On the flight back to Tinian, one of the crew-members of the bomber paused to compose a letter to his son. He wrote:

...the days of large bombing raids, with several hundred planes, are finished. A single plane disguised as a friendly transport can now wipe out a city. That means to me that nations will have to get along together in a friendly fashion, or suffer the consequences of sudden sneak attacks which can ripple them overnight. What regrets I have about being a party to killing and maiming thousands of Japanese civilians this morning are tempered with the hope that this terrible weapon we have created may bring the countries of the world together and prevent further wars (Gardner 155).

The dominant reasons for the utilization of this product have been debated by historians ever since the destruction of Hiroshima. On the individual level, critics blame the overly zealous attitudes of President Truman. On the domestic level, the support for the bombing comes from the American desire to end World War II, to assert their military strength, and to avenge the destruction caused by the attack on Pearl Harbor. On the international level, the rivalry between the United States and the Soviet Union was

¹ Research performed under the direction of Dr. Shaohua Hu (Political Science).

the culprit responsible for the deaths of hundreds of thousands of Japanese. Ironically, the use of the atomic bomb helped to create the longest period of peace in modern history.

Eyes like a Hawk: Individual Level of Analysis

Though the decision to drop the bomb on Hiroshima rested upon the shoulders of several decision-makers, the final say belonged to President Harry S. Truman. His lifetime goals never exceeded the aim of becoming a senator, but when the Democratic Convention opened in 1944, he was a favorite. Roosevelt reportedly called to ask if the democrats had a “fellow lined up” for him, but Truman was said to have denied his claim to the vice-presidency. Roosevelt asked others to “tell him that if he wants to break up the Democratic Party in the middle of a war, that’s his responsibility” (Allen 117). Truman accepted the nomination and served as vice-president and during his term he admitted in his *Memoirs* that he was afraid that “something might happen to [Roosevelt].” When the president died, Truman said he was “unprepared for it” (Allen 117).

He was described as a cheerful man “of simple tastes and limited cultural background,” and was in no way associated with major political decisions prior to his presidency. As a person, Truman was said to favor action as opposed to ideas. As a veteran of World War I, he was firmly convinced of the universal infallibility of the American civilization. He despised all totalitarian systems and resented yielding to them in any way (Fontaine 238-239). When it came to choosing sides between Hitler and Stalin, Truman did not see one as more favorable than the other. At one point, he stated that if he saw that Germany was winning the war, he would support Russia, and if Russia were winning, he would support Germany. Hopefully, the two would slaughter each other as much as possible (Alperovitz 30). In other words, Truman saw the world through the eyes of a hawk.

Truman’s belief in the unconditional surrender clause of Japanese negotiations reflected this aspect of his views well. The nature of Japanese soldiers and leaders was different from that of Americans. Japan’s soldiers lived by a “non-surrender code.” Baron Kantaro Suzuki, the Premier, had declared that Japan’s only choice was to “fight to the very end,” even if it meant the demise of “one hundred million” Japanese (Allen 195, 199). In other words, unconditional surrender was an impossible request to make. Several of the president’s advisors tried to make him understand this point. In contrast, Truman and other planners around him feared that a public peace proposal from Japan would cause “war weariness in the United States,” and might persuade the public to accept the peace proposal. This would prevent Americans from destroying “Japanese capacity to start a new war” (Allen 199). Finally, a compromise was reached. Secretary of War Stimson persuaded Truman to change “unconditional surrender” to “unconditional surrender of the armed forces” in his VE-Day statement (Allen 200). The phrase

“unconditional surrender of all Japanese armed forces” was later used in the Potsdam Declaration in 1946, which also warned Japan of “prompt and utter destruction” if these demands were not met.

Two days after this issuance, Suzuki dismissed the declaration as “unworthy of public notice,” and Truman proceeded to make the decision that would demonstrate what the ultimatum meant. However, Truman did not realize that Japan could hardly be threatened by a weapon of mass destruction it did not know existed (Gardner 161-162). Also, limiting the unconditional surrender to the armed forces did not guarantee the Japanese the right to “choose their own form of government” and to retain their current emperor, which was another reason for the rejection of the ultimatum (Allen 214). Truman’s main concern in ending the Pacific War was the potential for U.S. casualties, and the use of the atomic bomb was the only feasible way to avoid large quantities of American deaths (Allen 209). Created by the Manhattan Engineer District project, the bomb cost a total of 2 billion dollars to make. Truman had no doubt that this costly military weapon should be used (“Manhattan” 1, Gardner 157). The Pacific War merely provided the justification to unleash its power.

Some critics say that Truman should have demonstrated the bomb’s power to the Japanese, but it was feared that the bomb would either fail to operate, or that Japan would move the Allied prisoners of war to the location of the test (Allen 215). Others state that since Roosevelt refused to open negotiations with the Soviet Union regarding “international control of atomic energy,” and since he never openly objected to wartime utilization of the bomb, “it would have required considerable political courage and confidence for Truman to alter those policies” (Sherwin 962). However, nothing official ever kept Truman from reversing the direction of Roosevelt’s actions. Therefore, the ultimate decision to drop the atomic bomb was a result of Truman’s own hawkish views.

Justifiable Act of Belligerency: Domestic Level of Analysis

Americans perceived the atomic bombings of Japan as a “justifiable act of belligerency” (Graybar 889). The majority supported Truman’s decision for three reasons: the Japanese attack on Pearl Harbor, the rising death toll incurred by World War II, and the need to assert American strength.

On Sunday, December 7, 1941, The Japanese air force attacked a major United States naval base in Pearl Harbor, Hawaii without warning. In the end, 188 Army and Navy aircrafts were destroyed or damaged; seven battleships were sunk; and 2,403 American soldiers were killed. This was the first attack on the American homeland since the War of 1812. Before this event, President Roosevelt desired to enter the war in support of Britain, but the country was so pro-isolationist that any attempt to “lead the people into war would have resulted in certain failure” (Stiles 23). However, after Pearl

Harbor—"a date which will live in infamy," Americans became united in the desire to see the complete surrender of Japan (Allen 39). This outrage and resentment is part of the reason why the majority of the nation supported prophetic drop of the atomic bomb on the city of Hiroshima.

Another reason for the nation's support for the bombing of Hiroshima was the rising death toll of World War II. From the invasion of Normandy on June 6, 1944, to the German surrender in May 1945, America's participation in the war in Europe had cost the country 135,576 lives (Allen 201). This number pales in comparison to the sacrifices made by other countries, but that was a competition the American people did not want to win. Most Americans were very eager to end the war because the victory day in Europe brought an anticipation of peace, but Japanese soldiers were still in combat with Americans in the Philippines and Okinawa. Their Kamikaze aircrafts still crashed into U.S. warships, and their submarines were still at sea. More importantly, an army of more than four million Japanese men were preparing to fight to the last breath for their emperor in defense of their homeland (Allen 193). Therefore, many feared that defeating Japan was not going to be easy. The Pacific War was being carried out with little aid from the Allies, and the supply lines from the U.S. to the Pacific were longer than the supply lines to Europe, and lacked the large forward base Britain had provided earlier. In addition, the Japanese Empire encompassed a territory larger than that of the entire continental United States. Even if the home islands were invaded, American forces might face a lengthy and arduous war because of the "Japanese holdouts in widely scattered outposts" (Allen 202). For all these, military planners estimated that the war against Japan would be as enduring as the American intervention in Europe, and even bloodier, regardless of which military strategy was pursued (Allen 201). Even though no accurate estimates of U.S. casualties were available, the death-toll of any invasion would have been much greater than the American death-toll caused by dropping the atomic bomb. That was not what most Americans wanted.

Not everyone agreed with the assertion that the Pacific War would have been long and arduous. Admiral William Leahy, advisor to President Truman, wrote that the "Japanese were already defeated and ready to surrender because of the effective sea blockade and the successful bombing with conventional weapons." Also, while the British Prime Minister, Clement Attlee, thought that peace talks were useless because the "military were in command in Japan," making any agreement with the emperor useless, Colonel Saburo Hayashi, Secretary to the Japanese War Minister, wrote that their army was prepared to "beat the Americans on their first landing attempt. But if the Americans launched a second or third attack our food supply would have run out" (Gardner 158,166). Even the Pacific Survey's *Summary Report* on the issue stated that the

Japanese “would have surrendered prior to November 1,” and that dropping the bomb merely accelerated their submission (Gentile 1086).

A Weapon of Diplomacy: International Level of Analysis

The Yalta Conference was a meeting between, Franklin Roosevelt, Joseph Stalin, and Winston Churchill, in February 1945. Among the topics of discussion were the war with Japan and the reorganization of the Stalin-supported Polish Lubin government into a more democratic system that would include members of the government-in-exile, which was supported by the Western Allies. The USSR also secretly agreed to enter the Pacific War within three months of German surrender. In return it was promised South Sakhalin, the Kuril Islands, an occupation zone in Korea, the restoration of Port Arthur to a Russian naval base, and the co-administration of the Manchurian railroads by the Chinese and the Soviets (“Yalta” 1). The USSR was guaranteed these concessions because its “entry into the war would mean the saving of hundreds of thousands of American casualties” (Allen 200).

However, as the end of the war approached, the diplomatic relations between America and the USSR deteriorated rapidly and the Yalta Conference was perceived in an increasingly negative light by the U.S. The State Department worried about the Soviet designs in Europe and the Pacific. The American Ambassador to Moscow, Averell Harriman, warned Truman that the USSR was planning a “barbarian invasion of Europe,” and Secretary of State Edward Stettinius was urging Truman to “get tough with the Russians” (Allen 193, Sherwin 962). Stettinius felt that since the meeting of the Yalta delegation, the USSR had “taken a firm and uncompromising position on nearly every major question” that had arisen in their relations and this growing dominance of a Communist government was a rising concern for the United States administration. However, Stalin did make an effort to continue on friendly terms with America. His first act upon hearing of Roosevelt’s death was to tell Harriman “that he wanted to give some immediate assurance to the American people to indicate his...desire to continue on a cooperative basis” (Fontaine 239).

Unfortunately, the relationship between the two superpowers changed from bad to worse. Just forty-eight hours after Roosevelt’s death, Truman learned that the same leaders of the non-Communist government-in-exile who were supposed to be integrated into Poland’s governing body had disappeared into a Moscow prison. In retaliation, Truman stated that the United States never objected to the Lubin Committee’s role in the formation of a new government, but that the Yalta Conference did not give the “Warsaw Government...the right to veto individual candidates for consultation”(Fontaine 240). The development of the Polish government became the symbol for the future international relations between America and the USSR. The Soviet Union wanted to

adopt “the Yugoslav example as a pattern for Poland,” which was not at all attractive to the West, because that would mean the creation of yet another government in support of communism (Fontaine 239-242). Because of this, the relations between these two countries became more and more hostile. Harriman and Truman agreed that Stalin had every intention of breaking all of his agreements. Even though the Soviet Union made it clear that it would keep its promise and enter the war against Japan, there was “no guarantee that the Soviets would not pursue their own agenda independent of, or even in conflict with, America’s plans for the invasion” (Allen 203).

Thus, a problem arose: what would be the nature of the bilateral relations after the end of the Pacific War? Truman and Stimson began to think of the atomic bomb “as something of a diplomatic panacea for their postwar problems” (Sherwin 965). Secretary of State designate James Byrnes even told Truman that the bomb “might as well put us in a position to dictate our own terms at the end of the war” (Sherwin 965). Allowing for a test-explosion to be viewed remained impractical, and increasing importance was placed on the need “to end the conflict before the Red Army had had a chance to make major advances in Manchuria” (Graybar 888). Truman and his advisors agreed that dropping the bomb on Japan would not only end the Pacific War, but also provide a “settlement of the Polish, Rumanian, Yugoslavian, and Manchurian problems” (Sherwin 965). Therefore, the decision to drop the bomb was made, and it served as the “first major operation of the cold diplomatic war” with the Soviet Union (Graybar 888).

Conclusion: Dawn of a New Age

Some historians contend that the atomic bombing of Japan was merely an attempt to put an end to World War II; others insist that it was a political ploy to gain diplomatic leverage over the USSR; still others stand by the fact that both motives played an important role in the decision. However, one thing is for certain: the resolve to deploy this weapon of mass destruction began an age of warfare that is still unsurpassed in its destructive capacity, because its remnants stay with the victims for generations in the forms of genetic mutation and radiation disease. More importantly, it is a brand of demolition that will either force all nations to find mutual respect, or bring forth horrendous nuclear devastation. Regardless of any concrete causes as to the start of this age, “we will be damned as barbarians without vision or heart if we do not feel the deepest sadness at the necessity of authorizing such cruelty” (Winnacker 30).

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Stem Cell Research: Its Possibilities, Potential Hazards and Obstacles

Lauren Maltese¹ (Biology)

Stem cells have been experimented with for the past 20 years, but are now becoming more important as a means of healing. The medical field has proven its ability to heal sickness and disease, but transplants and regeneration of organs have many problems. Stem cells are now providing an alternative to this problem, but face many obstacles before they can be administered on a large scale. Although stem cells will be extremely beneficial, several issues have arisen over the years that have hindered stem cell research. These issues include the risks involved with using stem cells, the technological hurdles, and the politics of the matter.

What are stem cells? Stem cells are the original cells from which an entire organism develops. They are at first unspecialized, but eventually can then develop into specialized tissues or organs. The potential to develop into any type of cell and division for a long period of time without limit makes stem cells so promising in treating debilitating diseases (“ISSCR: Stem Cell Science”).

The two types of stem cells are embryonic stem cells and adult, or somatic, stem cells. Embryonic stem cells are primitive cells that come from the embryo and have the potential to become a wide variety of cells, making them pluripotent. Embryonic stem cells have unlimited potential as far as growth and differentiation. Embryonic stem cells are derived from a 3 to 5 day embryo, called a blastocyst. The cells in a blastocyst give rise to multiple specialized cells that can develop into any type of tissue (“Stem Cell Basics”).

Adult stem cells are undifferentiated cells found in adult tissues or organs. These stem cells are plastic, meaning that they can differentiate into cells of an unrelated tissue as well as into their original source. One of the problems with adult stem cells is that they exist in small numbers and remain non-dividing until activated by a disease or tissue injury (Turksen 1).

Stem cells come from many different sources. Research on adult stem cells goes back 40 years when scientists found that bone marrow contains at least two kinds of stem cells: *hematopoietic stem cells* and *bone marrow stromal cells* (or *mesenchymal stem*

¹ Research performed under the direction of Dr. Gregory J. Falabella (Physics) in conjunction with the freshman Learning Community LC7: *Science in a Technological World*.

cells). Hematopoietic stem cells form all the types of blood cells in the body and have been used in transplants for 30 years. Bone marrow stromal cells were discovered a few years later and are a mixed cell population that generates bone, cartilage, fat, and fibrous connective tissue. Scientists researching rats in the 1960's discovered that two regions of the brain contain dividing cells, which become nerve cells. It was not until the 1990s that scientists agreed the adult brain does contain stem cells that are able to generate the brain's three major cell types: *astrocytes* and *oligodendrocytes*, which are non-neuronal cells, and *neurons*, or nerve cells. Other adult tissues that contain stem cells include peripheral blood, blood vessels, skeletal muscle, skin and liver ("Stem Cell Basics").

Embryonic stem cells can be derived from a variety of sources. The main source is from an embryo. These embryos are extra embryos, those that were to be discarded, from couples who have used in vitro fertilization (Lanza 92). Embryonic stem cells can also be derived from aborted fetuses, umbilical cords, baby teeth and placentas. Stem cells from both the umbilical cord blood and the pulp under baby teeth are able to divide for longer times in cell cultures and may give rise to different tissues. Umbilical cord blood stem cells are used for stem cell transplantation to reconstitute blood cell formation in patients that have been irradiated or treated with specific drugs for cancer or leukemia. Also, in some genetic diseases, where patients have a problem forming normal blood cells, a transplantation of matched umbilical cord blood cells can give them a new blood-forming system. The new cells are infused into the vein of the patient. In a process called "stem cell homing" they are then able to find their way into the bone marrow ("ISSCR: Stem Cell Science"). The use of umbilical cords for stem cells is uncontroversial. The hindrance with using stem cells from umbilical cords is that the supply is limited because of the lack of funding, even though every child is a potential source. The umbilical cord blood has been proven effective in children who are small and resilient. The potential in adults is less clear because a single umbilical cord contains only about one-tenth as many blood stem cells as the typical bone marrow transplant (Seppa 339).

There are several potential uses of stem cells. The most important use of stem cells is to be used in cell-based therapies, which involves replacing diseased cells with healthy cells. Because stem cells differentiate into different cell types, stem cells provide the possibility of creating new tissues and cells to treat diseases such as Alzheimer's and Parkinson's diseases, spinal cord injury, stroke, burns, heart disease, diabetes, osteoarthritis, and rheumatoid arthritis ("Stem Cell Basics").

Scientists have been conducting experiments to discover the possibility of transplanting healthy heart muscle cells into a patient with chronic heart disease. In preliminary research with mice and other animals, it was found that bone marrow stem cells, when transplanted into a damaged heart, can generate heart muscle cells and

successfully repopulate the heart tissue. Human stem cells are currently being used to treat leukemia, lymphoma and several inherited blood disorders (“Stem Cell Basics”).

Those with Parkinson’s Diseases lack dopamine producing neurons. This disease may be the first disease to be treated with stem cells because scientists know that the specific cell type, DA neurons, is needed to relieve the symptoms. Scientist may be able to differentiate embryonic stem cells into cells that have the many functions of DA neurons. Scientists have also been trying to produce dopamine neurons from human stem cells in the laboratory (“Stem Cell Basics”).

Juvenile diabetes is another illness that may be treated using stem cells. Some scientists have coaxed stem cells into insulin-producing cells. When transplanted into diabetic mice the insulin-producing cells appeared to improve blood-sugar levels and survival. Scientists have been trying to understand Alzheimer’s disease by using embryonic stem cells to develop human brain cells with Alzheimer’s mutations. Another use of stem cells is to treat those with spinal cord injuries by transforming the stem cells into spinal cord tissue. Scientists’ goal is that the stem cells would restore movement when implanted in paralysis victims (Ulick 46).

Another use of stem cell research is that scientists may be able to uncover new information about human development. Scientists are trying to find out how undifferentiated cells become differentiated and what signals turn the genes on and off to influence this transformation. If scientists gain a better understanding of this process then new strategies for therapy can be developed when abnormal cells division and differentiation occurs, which is usually how cancer or birth defects develop. The third way stem cells could be used is to test new medications for safety on differentiated cells. Cell lines are already being used for this reason. For example, cancer cell lines are used to screen anti-tumor drugs (“Stem Cell Basics”).

Stem cell research is an extremely complicated area and there are many obstacles and potential hazards of using stem cells. First, it is very difficult to identify true stem cells, especially in adult stem cells where they exist in very few numbers. Scientists have developed tests to identify stem cells, but there are arguments that these tests are not very accurate. Stem cells can not be distinguished by appearance, only by their behavior. One test used to mark the pluripotency of a human embryonic stem cell is to inject embryonic stem cells into an animal’s body tissue. If they form a distinctive tumor, called a teratoma, which contains all three embryonic layers, their pluripotency is proved. Another test used is to mark embryonic cells and inject them into a developing animal embryo. If the marked cells turn up in all tissues when the animal is born, the cell line is deemed pluripotent. This test does not guarantee that the cell will differentiate in the lab (Lanza 92).

The next challenge is getting the cells to differentiate into a specific type of tissue. Most of the time the cells develop spontaneously into different tissue types. With timed administration of certain chemicals they can be directed into one cell type or another, but still prefer to become certain tissues. Scientists still do not fully understand the signals that cause the cells to develop into a certain tissue and are trying to profile the gene expression patterns as the cells differentiate in order to find the genes that could be turned on or off to direct the cells toward the desired tissue type (Lanza 92).

These obstacles are only part of the struggle. If and when the desired tissue type is obtained they are only useful if they can be transplanted to the right place and make connections with the other cells. The ideal situation would be to inject these cells into the part of the body that needs repair and let the cells regenerate on their own. This approach is far too dangerous because of embryonic stem cells' pluripotency. The cells may divide uncontrollably and form a teratoma and/or differentiate into the wrong tissue type. This could also lead to cancer. Teratomas containing fully formed teeth have been reported in experiments with animals. Therefore, instead of risking the harmful affects of simply injecting cells into the body, scientists are trying to coax embryonic stem cells into a more stable, but flexible progenitor-cell stage before administering them. By doing this, uncontrolled differentiation is avoided and cells can still differentiate into desired cell types by environmental signals (Lanza 92).

Once the cells adapt to their environment and regenerate new tissue there is still a possibility that the patient's body will reject the new tissue. Embryonic stem cells carry the same risk of rejection as transplanting organs because, like all cells, they carry antigens. Therefore, the immune system recognizes them as invaders (Lanza 92). This could cause the transplant to fail and possibly endanger the patient. Cell recipients would have to take drugs to temporarily suppress their immune systems, which could also be hazardous ("ISSCR: Stem Cell Science"). Some researchers see a solution in reducing the antigenic properties of the cells. This solution thus far has not been produced. Presently, the only way to solve this problem is to create an embryonic stem cell line using the patient's own genetic material through nuclear transfer or cloning (Lanza 92).

As mentioned earlier, a potential use of stem cells is to test new medications. However, to test the drugs effectively, the conditions must be identical when comparing different drugs. Scientists will have to be able to precisely control the differentiation of stem cells into the specific cell type on which drugs will be tested. Current knowledge of the signals controlling differentiation are not advanced enough to mimic these conditions precisely to consistently have identical differentiated cells for each drug being tested ("Stem Cell Basics").

There are several arguments directed against stem cell research. Most of those who are opposed to stem cell research are only opposed to using embryonic stem cells.

These people find nothing wrong with using adult stem cells from a human adult because no one is being harmed in the process. Pro-life advocates see embryonic stem cell research as unnecessary because adult stem cells can be used instead. Scientists feel that the use of embryonic stem cells would be more beneficial than using adult stem cells because they are more versatile and can develop into any type of cell. The most common argument used against embryonic stem cell research is that the embryo which the cells are being derived from is fully a person with all the rights any person has, the first right being the right to life. This is usually a religious, most notably Catholic, point of view in which the belief is that a person exists as early as conception. This argument is seen in the Instruction *Donum Vitae* issued by the Vatican's Congregation for the Doctrine of faith in 1987. This doctrine states: "The human being is to be respected and treated as a person from the moment of conception; and therefore from the same moment his rights as a person must be recognized, among which in the first place is the inevitable right of every innocent being to life." This doctrine also goes on to state that "No objective, can in any way justify experimentation on living human embryos or fetuses, whether viable or not, either inside or outside the mother's womb." This suggests that all research on embryos is murderous because they consider it the destruction of a living person (Lauritzen 20). Some say that it is not a matter of where the cells are coming from but where this research will lead us. Those who look to the future fear the real problem is that these cells have the ability to develop into entire organs. What line will be crossed in the future? Will scientists produce organs as spare parts? Those who support this argument look to the experiments already being done in the lab. Among these experiments was one conducted in 1998 in Massachusetts. Scientists injected a human nucleus into a cow egg. The resulting embryo appeared to be producing human protein and was destroyed early in fear of what it might grow into. In October of 2000 a monkey with a jellyfish gene was born. Many fear these testings will lead to human-animal species and other abominations (Krauthammer 60).

The arguments for embryonic stem cells research are in defense to the arguments against embryonic stem cell research. The most extreme argument to refute the argument that an embryo is a person with rights is the argument that the early embryo is little more than cellular material which demands little, if nothing, of us morally. This view can be seen in the work of the well-known legal scholar John Robertson. In his book, Children of Choice, he states that the real question is this: "Does procreative liberty entitle people to use their reproductive capacity to produce products or material to produce nonreproductive ends?" With this question arises another question if the harm outweighs the potential benefits of embryo research. This view is an extreme view and is rarely openly admitted (Lauritzen 21). The most common argument in favor of embryonic stem cell research is that most of the embryos come from in vitro fertilization

clinics. Those embryos that were to be discarded would be used to do the research. Instead of keeping the embryos locked in a freezer and then eventually discarded most see more benefits in using the embryos to find a cure for the many baffling diseases that are gripping our world today. This leads to the other argument that the reasearch could benefit so many. With the ability to regenerate damaged cells and tissue many people could be healed and so much could be learned by studying these cells (“ISSCR: Stem Cell Science”).

The politics of stem cells is perhaps the most detrimental obstacle of all. As with most great medical innovations comes controversy. The controversy surrounding embryonic stem cell research has raised questions on the funding of such a project. Without funding, the research is not possible. Funding such a project requires much reflection on the matter and all of the issues and people involved. Three years ago a partial ban was placed on federal funding of embryonic stem cell research. Scientists were only allowed to work with embryonic stem cell lines created before the policy was announced in August 2001. Scientists figured it might as well be a total ban because only about 15 embryonic cell lines are available to researchers. Some of the lines are sickly and difficult to cultivate; other display genetic abnormalities. Since President Bush’s re-election the ban on embryonic stem cell research has not yet been lifted (Soares 97).

The use of stem cells in today’s day and age has proved to be increasingly imperative. The diseases that exist today are becoming more difficult both to understand and to treat. A large portion of the population have illnesses with no hope of recovery. The use of stem cells can potentially provide many cures to baffling diseases and paralysis. It is impossible to expect that we can use the methods we already have forever. As these diseases advance and become more difficult to treat, so must medical research. If funding and support is not available to do this research the possibilities of treatment will never be explored. Many people are against stem cell research, but the truth is that a stand cannot be taken unless the possibilities are known. Without so much as the chance to explore this area we will never know the potential cures that are greatly needed.

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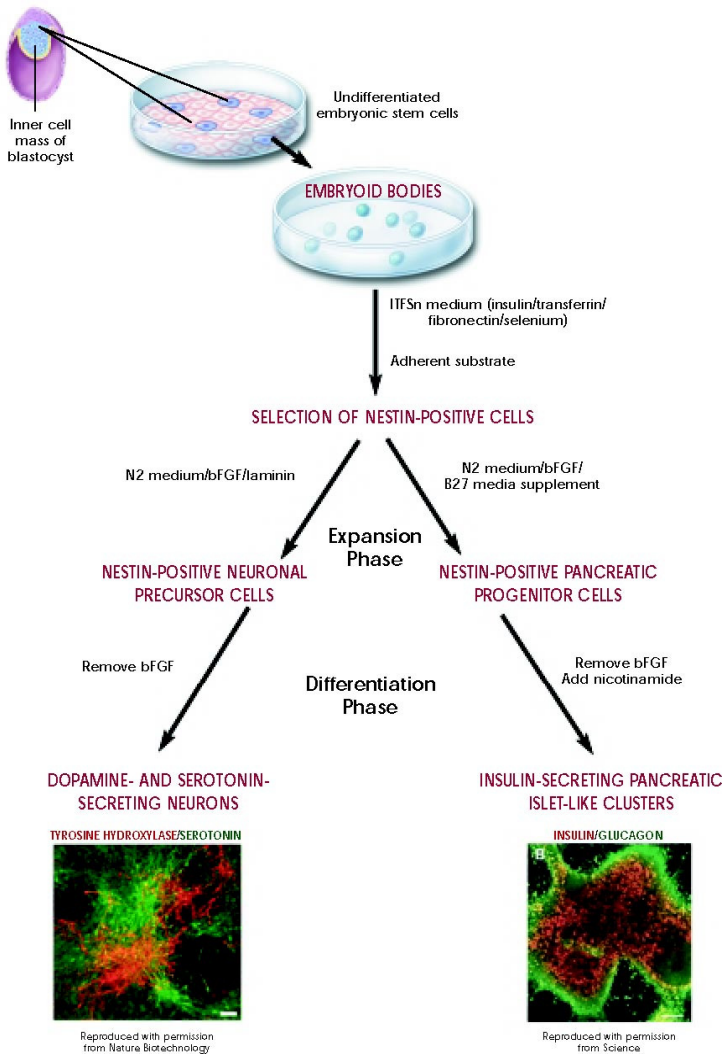
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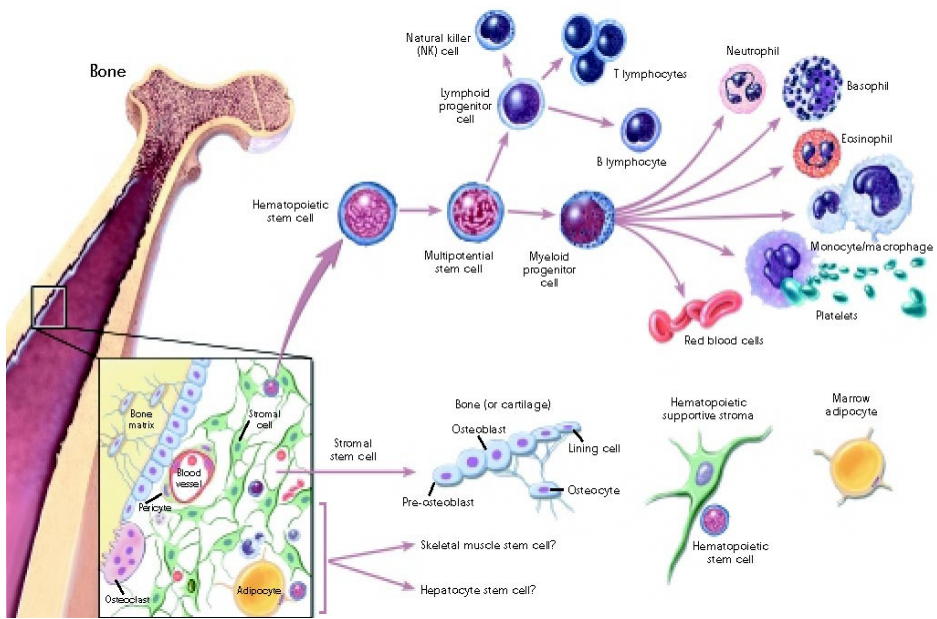
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Appendix A: Directed Differentiation of Mouse Embryonic Stem Cells



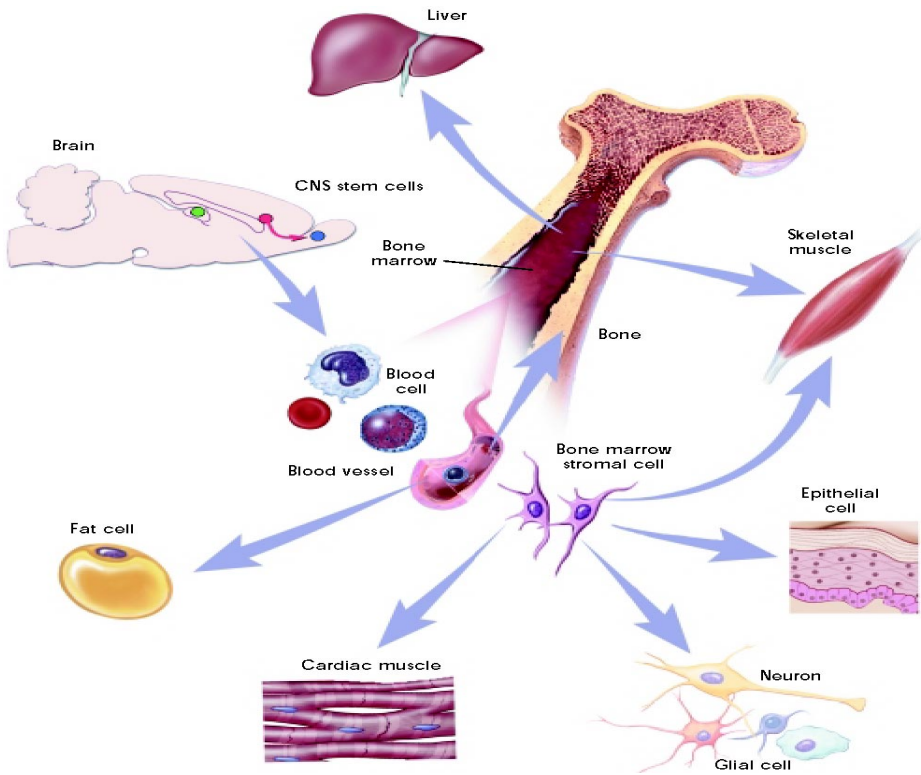
If cells are allowed to clump together to form embryoid bodies, they begin to differentiate spontaneously. They can form muscle cells, nerve cells, and many other cell types. So, to generate cultures of specific types of differentiated cells—heart muscle cells, blood cells, or nerve cells, for example—scientists try to control the differentiation of embryonic stem cells. They change the chemical composition of the culture medium, alter the surface of the culture dish, or modify the cells by inserting specific genes. Through years of experimentation scientists have established some basic protocols or "recipes" for the directed differentiation of embryonic stem cells into some specific cell types ("Stem Cell Basics").

Appendix B: Hematopoietic and Stromal Stem Cell Differentiation



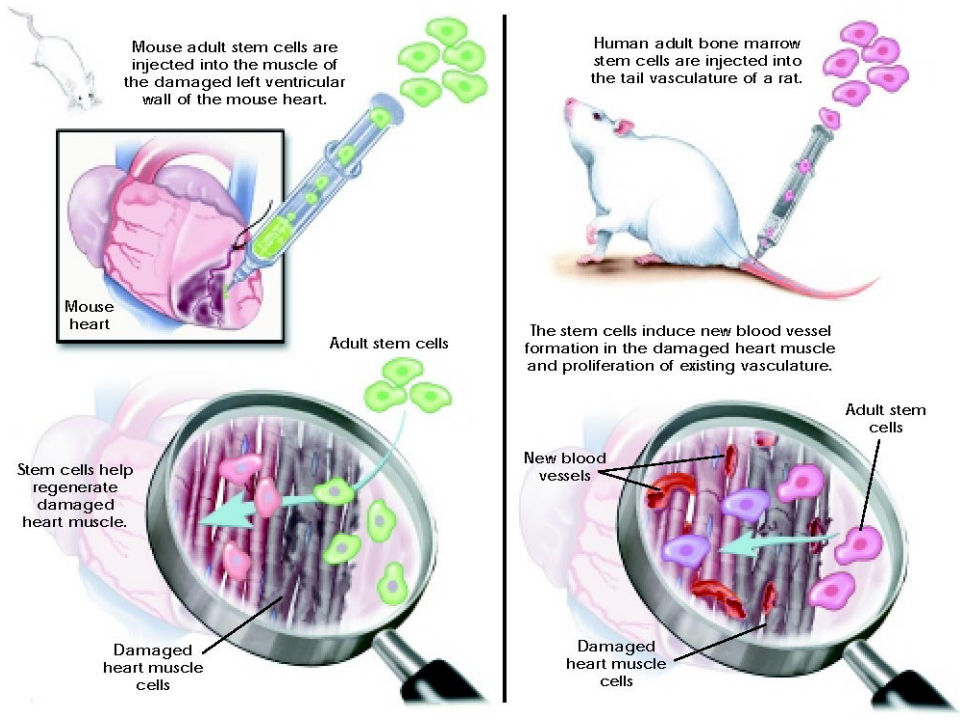
Scientists have reported that adult stem cells occur in many tissues and that they enter normal differentiation pathways to form the specialized cell types of the tissue in which they reside ("Stem Cell Basics").

Appendix C: Plasticity of Adult Stem Cells



- ✚ Hematopoietic stem cells give rise to all the types of blood cells: red blood cells, B lymphocytes, T lymphocytes, natural killer cells, neutrophils, basophils, eosinophils, monocytes, macrophages, and platelets.
- ✚ Bone marrow stromal cells (mesenchymal stem cells) give rise to a variety of cell types: bone cells (osteocytes), cartilage cells (chondrocytes), fat cells (adipocytes), and other kinds of connective tissue cells such as those in tendons.
- ✚ Neural stem cells in the brain give rise to its three major cell types: nerve cells (neurons) and two categories of non-neuronal cells—astrocytes and oligodendrocytes.
- ✚ Epithelial stem cells in the lining of the digestive tract occur in deep crypts and give rise to several cell types: absorptive cells, goblet cells, Paneth cells, and enteroendocrine cells.
- ✚ Skin stem cells occur in the basal layer of the epidermis and at the base of hair follicles. The epidermal stem cells give rise to keratinocytes, which migrate to the surface of the skin and form a protective layer. The follicular stem cells can give rise to both the hair follicle and to the epidermis ("Stem Cell Basics").

Appendix D: Heart muscle repair with adult stem cells



Hagar

Stephanie Williams¹

Hagar, the Egyptian handmaid of Sarai, is a key figure in the Bible. She is first mentioned in Genesis 12. Sarai, as a barren wife, gives Hagar to Abraham so he can have an heir. As Abram's concubine, Hagar gives birth to Ishmael (IDB III 508). She is often viewed as a "persecuted Madonna," and is the first single mother mentioned in the Bible (Dennis 62). Her son Ishmael is known as the father of Islam, and therefore Hagar plays a truly pivotal role in biblical history.

The name Hagar means "wanderer," and is most likely derived from the Arabic word *hajara*, which means "to migrate" or *hagger* meaning "the alien" (Meyers 86). The roots of Hagar's name may be related to the part she plays in the Bible. She is truly alone as a young slave girl. Hagar is an alien in Abram's home (Meyers 87). She is given to Abram to bear his child. Once Sarai gives birth, she is basically abandoned, forced to live and raise her child Ishmael alone. In this sense, Hagar never has a stable home or planted roots; she is a wanderer (Meyers 86).

In Genesis 16 Hagar makes her biblical entrance. She is introduced as Sarai's Egyptian slave-girl, a foreigner. She is treated exactly as a slave. Hagar is given no privileges or power. In most biblical passages when a character is introduced for only one or two stories they do not have names, yet such is not so for Hagar. She not only possesses a name, but as the biblical story unfolds she is given the honor of naming God in her speech (Dennis 63). Neither Abram nor Sarai ever use Hagar's "name when speaking to one another" (Dennis 65). Hagar is not human to them; she is merely a possession. "She is given no words to say, no initiative to take" (Dennis 65). She becomes aware she is bearing a child and flees. These are the only actions Hagar takes. All other actions are done to her.

The reader is made aware that Sarai, Abram's wife is unable to bear children. Sarai says to Abram, "You see that the Lord has prevented me from bearing children; go in to my slave-girl; it may be that I shall obtain children by her" (Gen 16:4). This line proves that Hagar is given the rights of a slave (Dennis 63). This custom may seem rather peculiar, but in some ways it is similar to modern day concept of surrogate mothers. According to cuneiform texts of the first and second millennium BCE, this type

¹ Research performed under the direction of Dr. Joedy Smith (Religious Studies) in conjunction with the freshman Learning Community LC10 *Biblical Drama: Music and Spirit*.

of situation was common. A marriage contract from Anatolia, an Old Assyrian colony, which dates back to 1900 BCE, clearly states that if a wife does not bear a child within the first two years of marriage she must purchase a slave for her husband. The Code of Hammurabi contains a similar stipulation. This code of laws declares that if a wife is unable to give birth to a child for any reason, the husband may take a second wife or the wife may give her husband a slave girl (Meyers 86).

Abram obeys Sarai and impregnates Hagar. Both Sarai and Abram view Hagar as a “womb with legs” (Meyers 86). Once Hagar has conceived, she gains a new air of confidence and, “looks with contempt on her mistress” (Gen 16:4). Hagar views her mistress with hatred. Sarai begins to loathe Hagar; perhaps she is jealous that she can conceive. Abram gives Sarai permission to be in control of Hagar once again (IDB III 508). When Sarai regains control over Hagar she mistreats and abuses her in a manner consistent with the treatment of a normal slave. According to the Code of Hammurabi, a woman slave can be treated as an ordinary slave if she attempts to act as an equal to her mistress (Meyers 86). Hagar does not stand for such degradation and flees from Sarai.

Hagar is found at a spring of water on her way to Shur by an angel of God. It is here that she is told to go back to Sarai and to submit to her. According to Carol Meyers, this command is somewhat odd in that God would want Hagar to be treated as a slave and that he respects property right over freedom (Meyer 87). Until this point the God of Israel always took the side of the oppressed. “That is the nature of the God of Exodus, of the God of the Torah, and of the God of the prophets” (Dennis 66). According to ancient Israelite law, runaway slaves cannot be returned to their masters (Deut 15:16). This is perhaps one of the most unsettling sections in the Bible. God seems to be on the side of the oppressor (Dennis 66).

When all faith in the goodness of God seems to have vanished, God’s angel then informs Hagar that she will bear a son, Ishmael. He will be a “wild ass of a man with his hand against everyone, and everyone’s hand against him; and he shall live at odds with all his kin” (Gen 16:12). God will, “greatly multiply her offspring that they cannot be counted for multitude” (Gen 16:10). The only other people in the Bible to hear such a statement are Abram, Isaac, and Jacob. Hagar, the slave woman, is one of four people to hear a promise from the lips of God. She is one of only three women in Genesis to engage in a conversation with God, and the only woman to experience a theophany, a direct revelation of God (Dennis 67). Both Eve and Sarai have very brief encounters with God and their experiences with God pale in comparison with Hagar’s. The manner in which God’s messenger announces the birth of Hagar’s son is similar to the annunciations of Samuel to Hannah and Jesus to Mary. These women give birth to children with special and very specific fates. All of the women are addressed individually and notably “not through their husbands” (Meyers 87).

One can draw many similarities between this passage and the dialogue in Genesis 15:13. In Genesis 15:13, God speaks to Abram. He states that the children of Israel must be enslaved before they are saved. Yahweh has heard Hagar's pain in the same way that he will hear the cries of the enslaved Israelites in Egypt and he will save both. Hagar is assured that God will, "Greatly multiply her offspring so that they cannot be counted for" and in this sense salvation will be hers (Gen 16:10). With "supreme irony" Hagar is a slave from Egypt and she foreshadows the enslavement of the Jewish people (Dennis 65). Hagar is to be treated harshly, just as Abram's descendants will be "aliens in a land that is not theirs, and shall be slaves there, and they shall be oppressed" (Gen 15:13).

In many ways Hagar can be viewed as Abram's analogue (Meyers 87). God speaks directly to both Abram and Hagar. The relationship God creates with Hagar is completely separate from the relationship forged with Abram, yet the terms are extremely similar. Hagar, "named the Lord who spoke to her El-roi" (Gen 16:13). Her name for God means "the one who sees me" (NIB I 453). Hagar's name for God proves to be a metaphor for her new found hope as opposed to the preexisting name for God. She has now experienced a God who truly sees her rather than a God who merely speaks at her (NIB I 453). She follows God's commandment, returns to Abram and Sarai, and gives birth to a baby boy whom Abram names Ishmael.

God soon tells Sarai that she too will bear a child. Both Abram and Sarai find this notion inconceivable, for Sarai is well past her child bearing years. Yet, just as God says, Sarai gives birth to a son named Isaac. Both Ishmael and Isaac grow up together. One day Sarah sees both children playing with one another. Sarah says to Abraham, "Cast out this slave woman with her son; for the son of this slave will not inherit along with my son Isaac (Gen 21:10)." Hagar and Ishmael are then cast out. A parallel can be drawn between the expulsion of Hagar and the struggling freed slaves of Egypt: Just as Hagar will have to struggle in the wilds of Beer-sheba, so too will the freed Israelites as they wander through the desert. Both Hagar and the Israelites will have to face thirst and hunger as they wander through wilderness (Meyers 87). Abraham was extremely bereft at the thought of the entire ordeal. God, however, promises Abraham that both his sons will inherit a nation (Gen 21:12).

Hagar and Ishmael struggle facing the elements. Soon their water is gone, and they begin to thirst. Hagar says to God, "Do not let me look on the death of the child" (Gen 21:16). As Hagar says this, Ishmael begins to cry. God hears his cries, and saves both Hagar and Ishmael. God forces Hagar's eyes open and a well of water is now in front of her. The two continue to live in the wilderness of Paran. Hagar's death is not mentioned in the Bible. Ishmael has twelve sons, and therefore Hagar is the ancestor of the twelve tribes of Ishmael (ABD III 18).

Hagar is mentioned in the New Testament. She is used as a metaphor in Galatians 4:21-31. In this allegory Hagar is represented by the Sinai covenant and Sarah the new covenant which comes to fruition through Christ (IDB III 509). This passage contrasts free people and slaves. Hagar's child is born out of the flesh and Sarah's out of a promise (Meyers 88). St. Paul recounts the story told in Genesis, but with an extremely negative view of Hagar. There is no mention of God's promises to Hagar, just God's pact with Sarah. St. Paul does not state that Hagar's descendants will be numerous and that God saved both Hagar and Ishmael from death. Hagar's child is said to have "persecuted the child who was born according to the spirit (Gal 4:19)." Perhaps St. Paul slanted view of this situation is related to the fact that he clearly holds no respect for the Jewish Law, and Hagar represents the Israelite law. Paul feels that Christians are children of the free woman and born out of spirit (Meyers 88).

Through extensive research I have made many fascinating discoveries about Hagar, "the persecuted madonna" (Dennis 62). She is truly an intriguing biblical character. Although Hagar only appears in a few brief chapters in the Bible, she plays a crucial part. Hagar may be viewed as an inspiration for strength. As the Biblical story unfolds, she proves to be an incredibly strong woman with an indomitable spirit.

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Esther

Rachel Dudley¹

Esther, the Persian Jewess Queen, is the heroine of the Book of Esther, which is part of the Writings, or Ketuvim, section of the Old Testament (ABD II, 633). The Book of Esther was probably written down between 180 and 100 B.C.E (IDB II, 151) and most likely took place during the 5th Century B.C.E. (WIS, 75). In the Hebrew Scriptures, the Book of Esther is the last of the five Megillot or scrolls, and is referred to as *megillat Esther*, the Scroll of Esther (The Writings, 241 and ABD II, 633). In the Septuagint, the Book of Esther is found before the prophetic books and after the historical or poetical books, and in the English Bible, it is found between the historical books and the poetical books (The Writings, 241).

The Book of Esther begins with a 180-day banquet held by Ahasuerus, King of Persia. When, in the course of this banquet, Queen Vashti refuses to appear in front of the King's guests, Ahasuerus banishes her. He then holds a beauty contest of sorts to choose a new queen. Esther, cousin and adopted daughter of Mordecai, becomes queen, all this time keeping her Jewish identity a secret.

Haman, the King's chief advisor, vows to annihilate the Jewish race when Mordecai refuses to bow to him, and convinces the King to sign an edict. Mordecai sent word to Esther of the situation, and although entering the throne room without being summoned by the King could result in death, Esther promises to go to the King as she utters the famous lines, "and if I am to perish, I shall perish!" (Esth. 4:16) Esther goes to the King, who not only welcomes her but offers her anything, even half the kingdom. Surprisingly, Esther merely invites the King and Haman to a banquet. At the banquet, the King again offers to fulfill any request that Esther may have; and again, Esther merely invites the King and Haman to another banquet.

At the second banquet, the King again offers Esther anything she wants. This time, Esther makes a stirring plea, saying, "let my life be granted to me as my wish, and my people as my request. For we have been sold, my people and I, to be destroyed, massacred, and exterminated." (Esth. 7:3-4) King Ahasuerus asks Esther who it was that did this, and Esther proclaims the name of Haman, in his very presence. The King, furious, orders Haman to be impaled on a stake that Haman had built for Mordecai.

¹ Research performed under the direction of Dr. Joedy Smith (Religious Studies) in conjunction with the freshman Learning Community LC10 *Biblical Drama: Music and Spirit*.

Esther is given all of Haman's land, Mordecai becomes the King's chief advisor, and the edict ordering the annihilation of the Jews is reversed. The Jews destroy their enemies, and the holiday of Purim is instituted.

The Book of Esther is mainly known because of its relation to the Jewish holiday Purim. Purim, named for the lots (*pur*) that Haman cast when deciding what day to kill the Jews, is a joyous holiday. It is a day for celebrating the fact that the Jews were not annihilated in Persia, and for much feasting and merrymaking. People dress up and send each other bags of goodies. Most importantly, the Book of Esther is chanted in synagogues everywhere.

One of the most surprising things about the Book of Esther is the lack of religion. In fact, G-d is never mentioned in the Hebrew Book of Esther, and only one religious practice – that of fasting – is mentioned (WIS, 76). Esther herself is also not religious. “Jewish identity seems to be primarily ethnic, not religious. It is who Esther is that makes her Jewish, rather than what she practices or believes.” (WIS, 76) Esther does not explicitly take part in any religious rituals, including that of prayer. It is not G-d who saves the people, instead it is Esther. (The Writings, 242). “Many commentators have argued that religious beliefs, such as the belief in [G-d's] protection of the chosen people, are present. This argument may be valid; however, it remains true that the presence of [G-d] is conspicuously absent.” (WIS, 76) Although some believe that “the omission of reference to [G-d] is understandable in a book intended to be read at a festival of merrymaking, noise, and conviviality,” (IDB II, 150) many feel that the omission of G-d and religion is not appropriate for a part of the Bible.

This feeling led some scholars to write 6 extra passages comprised of 107 verses which were later adopted by Christian scholars and can be found in the Apocrypha under the title “Additions to Esther” (WIS, 77). “The additions, which probably were not composed at the same time by the same person, can be dated to the second or first centuries [sic] B.C.E. because of their literary style, theology, and anti-gentile spirit.” (WIS, 77) These additions are not included in the Hebrew Bible. Although the Book of Esther is left unchanged and only additions are made, Esther's character differs greatly, as does Mordecai's (WIS, 77 and WBC, 126). Among other changes, Esther is portrayed as a stereotypically weak woman who does what men tell her. Mordecai has a much more central role in the story. The Additions to Esther include a lengthened telling of Esther's unsummoned approach to the King, where Esther becomes weak and even faints (WIS, 78). Religion is also made a part of the story. Esther and Mordecai pray, Esther follows holiday and dietary customs as much as possible and regrets the times when she can not, and G-d is mentioned over 50 times. (WBC, 126 and WIS, 77) This shows that in the Apocrypha, G-d is the hero of the story, not Esther, a mere human. (WIS, 78)

The lack of G-d and religion in the Book of Esther led Jews and Christians alike to question Esther's place in the canon. "Esther did not achieve undisputed canonical status in Judaism until after the third century C.E. The Western church accepted the book as canonical in the fourth century C.E., while the Eastern church did not accept it until the eighth century." (WBC, 125) The Book of Esther was almost not included in either tradition's canon because of the lack of the presence of G-d, and was eventually included only because of its connection with Purim, and maybe then only because of popular pressure (WIS, 76 and WBC, 126).²

Another problem that arises with the Book of Esther is its historical accuracy. There are many parts of Esther that are grounded by other historical documents. The literary form of Esther follows the general form for historical books in the Bible (IDB II, 151). "It is now generally accepted that Ahasuerus (*'Ahashwerosh*) is the Hebrew rendering of the Persian *Khshayarsha*, a name more familiar in its Greek form, *Xerxes*." (IDB II, 151) Xerxes did rule over Persia from 485-465 B.C.E. (WIS, 75) There is archaeological evidence that "there was a Persian official named *Marduka* (Mordecai) in Susa at the end of the reign of Darius I or the beginning of the reign of Xerxes." (IDB II, 151) In addition, many customs referred to were real Persian customs (IDB II, 151).

Unfortunately, the historical accuracies stop there and the inaccuracies take over. First of all, Xerxes married Amestris, not Vashti or Esther. At the time of Xerxes' rule, the Persian empire had only 30 provinces, not the 127 provinces mentioned in Esther 1:1. (The Writings, 243) Lastly, "if Mordecai was among those who went into exile in 597 B.C. (2:6), he must have been at least 122 years old when he became prime minister in the twelfth year of Xerxes." (IDB II, 151) There are also many events in the Book of Esther that, although they cannot be proven wrong, were very unlikely. "Whether the author invented a wholly fictional account together with the festival of Purim which it purports to explain, whether he was putting in Jewish form a Babylonian festival which originated in mythical adventures of the divine cousins Marduk and Ishtar, or whether he based his romance on some incident involving the historical Xerxes and *Mardua*, ... is difficult to tell. In any case, it seems probable that the book of Esther is primarily romance, not history." (IDB II, 151)

Every book in the Bible has a purpose, and the purpose of the Book of Esther is seemingly obvious: it provides the historical basis for Purim (ABD II, 634 and IDB II, 150). Although this certainly seems to be the case, and may very well be, some scholars believe that the Book of Esther was not originally written to explain the origins of Purim; rather that after the story was written, a connection with the Hebrew word for lots, *pur*,

² Please note that the rest of this paper will only discuss the Book of Esther as it is presented in the Hebrew Bible.

was made with the name for the holiday, *purim*. (WBC, 125) These scholars believe that “the purpose of the Book of Esther is to demonstrate to Jews living in exile that it is possible to achieve success in the country of one’s exile without giving up one’s identity as a Jew.” (WIS, 76) The Book of Esther gives exiled Jews a role model and a code of conduct “that will enable them to attain security and to lead happy and productive lives.” (WBC, 129)

The Book of Esther also “gives encouragement to the exiled Jews that they, although powerless in the Persian Empire, can, by their resourcefulness and talents, not only survive but prosper, as does Esther.” (WIS, 75) “Esther, precisely because she was a woman and therefore basically powerless within Persian society, was the paradigm of the Diaspora Jew, who was also powerless in Persian society.” Because of Esther’s success, she served as a role model for every Diaspora Jew. (WBC, 126)

There is much that is interesting about Esther’s name itself. First of all, as is common with characters in postexilic literature, Esther has two names: Esther and Hadassah (WIS, 86). The name Esther “is used when she is given her official Persian title as queen; [whereas the name] Hadassah (Hebrew “Myrtle”)...seems to be regarded as her Jewish name.” (IDB II, 149) Hadassah was also most likely her birth name (EJ VI, 906). The interesting thing about the name “Esther” is that there are three possible meanings, and it is almost impossible to discern which one to use. The two most common origins for her name are the Akkadian *Ishtar*, the Babylonian goddess of Love, and the Persian *stara*, meaning star. (ABD II, 633 also IDB II, 149 and WIS, 74) The third less common but still possible origin for Esther’s name is that it comes from the Median *astra*, which means myrtle – a name that much better fits the undisputed meaning of her Hebrew name. (ABD II, 633)

If using the goddess Ishtar as the origin of Esther’s name, it is very interesting to reexamine the Book of Esther in light of local mythology. Besides Esther’s name being connected to Ishtar, Mordecai’s name is similar to the Babylonian god Marduk. Haman represents the Elamite god Humman, and Vashti’s name is connected with the Elamite goddess Mashti. In this context, the Book of Esther is not a Jewish story at all; rather it “represents the triumph of the Babylonian god Marduk over the ancient deities of the Elamites.” (The Writings, 243) Furthermore, some scholars connect Purim with the Persian festival Farvadigan, which celebrates the dead. Even though the Book of Esther may simply be a variation on a Pagan tale, that does not mean that it should not be a part of the Jewish and Christian canons. The form, characters, and plot make the Book of Esther a Jewish story. (The Writings, 243)

Esther’s personality is also very interesting. In the beginning of the book, we see Esther as beautiful and obedient, a woman who simply does what others tell her to. (WIS, 75 and LGB, 337) Although youth and beauty make her queen, wits and courage help her

save her people as Esther develops in many ways through the course of the story. (WIS, 75) At first, it seems that Mordecai is the one in control, but when Mordecai asks Esther to go to the King, Esther makes a shift in character from obeying men to controlling the events of her life and the lives of her people. She stops reacting and starts acting. (WBC, 128) However, it is not until Esther proclaims the words, “if I am to perish, I shall perish!” (Esth. 4:16) that Esther makes the total transition from a pliant, obedient young girl to a woman who is willing to take action to help others and accept whatever consequences may follow. (WIS, 76)

Esther has become “a symbol of heroic resistance against persecution.” (IDB II, 149) She is a role model for Diaspora Jews and for anyone who is oppressed or powerless. Esther’s actions encourage us to examine the potential purpose of our lives (LGB, 341), and to take an active part in our lives and the lives of those close to us – two principles we should all try to follow.

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Same-Sex Domestic Violence

Shara Zaslow (Sociology) ¹

Domestic violence is a problem that exists in modern society, and has been increasing over the years. Traditionally, when one thinks of domestic violence, a man beating a woman comes to mind. This isn't necessarily just a false stereotype; in heterosexual couples, 95% of the time, the man is the abuser and the woman is the victim. A large group of people, however, is left out of the typical domestic violence scenario. The gay/lesbian community is encountering the same problems with domestic violence just as frequently as heterosexual couples do. In fact, according to the National Coalition Against Domestic Violence, anywhere between 25% and 33% of same-sex couples encounter abuse sometime during their relationship. Same-sex domestic violence is an issue that is often completely ignored by society as a whole. The reasons for such prevalent abuse in homosexual relationships vary on a case-by-case basis: internalized homophobia and heterosexist beliefs are two widely acknowledged causes. Another interesting cause is self-hatred in the gay community. It is this self-hatred and internalized homophobia that is at the root of same-sex domestic violence. Often overlooked by the government as well as society, violence in same-sex relationships occurs just as often as it does in heterosexual relationships. It is a problem that needs to be addressed and stopped. (Peterman, Dixon 40)

Domestic violence occurs in a variety of different ways. It can be defined as "A pattern of violent and coercive behaviors whereby one attempts to control the thoughts, beliefs, or behaviors of an intimate partner or to punish the partner for resisting one's control." (Ashcraft 2000; Jacobson & Gottman, 1998, Lobel, 1986. Qtd. In Peterman, Dixon 40) Basically, domestic violence is any behavior that can hurt or harm another person in any way. There are different types of abuse that can classify as domestic violence. Physical abuse is the type of violence that is the most visible. This can be considered any physical action committed by one person directed towards another; examples include hitting, punching, kicking, throwing objects, or pushing another person, although there are many more examples than just those listed. Emotional, or verbal abuse, is another common form of violence. This consists of, but is not limited to, name-calling, criticism, humiliation, manipulation, and internalized homophobia, which will be

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explained in greater detail later on. Financial dependency is often over-looked as a form of abuse, but controlling one's partner financially classifies as abuse. Controlling how/when a partner spends his/her money, keeping him/her from getting a job, and expecting financial support are just a few ways that financial dependency could be considered abusive. Sexual abuse is also fairly common, and consists of one forcing his/her partner to perform unwanted sexual acts, withholding affection, criticizing sexual performance, and having affairs or accusing one's partner of having affairs. Minimizing/denying is another form of abuse which is also often over-looked. Making an abusive situation out to be something insignificant or claiming that it was mutual can make an abusive situation even worse. Intimidation is a big factor in same-sex domestic violence, and is also another form of abuse. Making one's partner feel threatened and fear for his/her life is a common tactic used by abusers to keep their partners quiet about the abuse. It also forces the victim to stay with their abusive partner, out of fear of what will happen if they do not. (Peterman, Dixon 41)

It seems that the main reasoning behind same-sex domestic violence is the internalized homophobia and intense self-hatred that abuser feels. These feelings of anger, bitterness, and loathing can spark many different secondary emotions and means of coping in different people. The methods described above are some of the many manifestations of this.

Many fail to distinguish between the severity of the different types of abuse, and refuse to recognize that same-sex domestic violence incidents differ on a case-by-case basis. However, same-sex domestic violence cases can usually be classified into one of four major patterns. Common couple violence is abuse that is typically mutual. In cases such as these, there is no designated victim or abuser; the couples are equal, but the relationship is obviously not healthy. Common couple violence cases tend to remain relatively stable over time, and rarely escalate into a more severe form of abuse. Intimate terrorism occurs when one partner consistently tries to exert dominance over the other. Violence like this can often escalate to something quite severe. Violent resistance can be better-described as self-defense, and mutual violent control can be defined as a battle for control in the relationship that results in both partners vying for dominance in ways that resemble an intimate terrorism pattern. (Crosbie-Burnett, Mourot, D. Potoczniak, M. Potoczniak 252-253)

An abusive partner is not always something that one can spot right away. In fact, most victims fail to realize that they are being abused until a tragic, severe event occurs. There are, however, warning signs for a potential victim and those around them to look for if a partner is suspected of being an abuser. Many abusers have a past history of being abusive, although they may claim that their previous partner provoked it. Jealousy and hypersensitivity are common emotions in abusers; they react strongly to

everything, even minor incidents. Abusers often have high and unrealistic expectations of their partners. Often times, the phrase “if you love me, then...” is used, making the victim feel guilty for not complying with whatever unreasonable request is asked of them. Blaming a partner for problems in the relationship, or violent feelings that one has is another sign of abuse. Often times, this can turn into a verbally or even physically abusive situation very quickly. Using any type of physical force on a partner, threatening violence, or breaking an object is also a signal that the relationship could, potentially, turn abusive quickly. Sudden mood changes and controlling behavior can spark a lot of arguments. Physical abuse can also result from controlling behavior, and often times, a victim will constantly feel like they are being dominated. Sex is also used as a tool of abuse. Violent partners will force their significant others to have sex, even when he/she is sick or tired, and they use sex as a make-up tool; if they were abusive, they will apologize with sex. Rigid gender roles go hand-in-hand with controlling behavior. The victim is constantly put in the submissive, “female” position, where he/she is made to feel inferior, irresponsible, and a lesser-quality person overall. Another sign that is not as obvious as others is a fast-paced relationship. Relationships that get very involved in a short period of time are especially prone to becoming violent, because the victim is made to believe that there is an intense, passionate love, and if this is true, then their partner would not be abusive. While these are only potential warning signs, there are many more ways to tell that one is being abused. However, it usually takes an outsider to recognize the abuse. (“Gay, Lesbian, Bisexual and Transgender Domestic Violence”)

Because same-sex domestic violence is severely ignored and over-looked in modern society, certain false myths and beliefs exist surrounding it. One of the biggest and most untrue statements is that only straight women are victims of domestic violence. Obviously, this is not true. Generally, in heterosexual relationships, the woman is the victim. In homosexual relationships however, “An annual study of over 2,000 gay men reflects that 1 in 4 gay men have experienced domestic violence. These numbers are consistent with research done around battering among opposite-sex couples, and lesbian couples.” (“Gay Men’s Domestic Violence Project”) Another common and largely untrue belief about same-sex domestic violence is that it’s “not as violent or serious because both individuals are of the same gender.” (Crosbie-Burnett, Mourrot, D. Potoczniak, M. Potoczniak 253) Especially between men, abuse is seen as a “fair fight” simply because both parties are men. An even more ridiculous myth is that the abuser is always the partner who is physically bigger and stronger. Size is never an accurate indicator of who the abuser is. Emotions such as anger and resentment can be much more powerful than one’s physical stature. Some also believe that domestic violence is a form of S&M (somasochism) and that the victims actually get pleasure out of it. This myth is much more prevalent in gay male relationships. While there is a fine line between S&M and

abuse, it is a line that is made very clear between partners. Nobody likes to be abused, even if they do practice S&M. In domestic violence cases as a whole (both heterosexual and homosexual), it is often believed that the victim was “asking” to be abused, because of a fight over something trivial, or a simple disagreement. Just as people don’t like to be abused, they never ask for it either. (“Gay Men’s Domestic Violence Project”) Because of strict societal gender roles, heterosexism, and internalized homophobia, these myths exist and create false pretenses about same-sex domestic violence. Gender roles indicate that there needs to be the “man” who is dominant, and the “woman”, who is submissive, in every relationship. These strict societal gender roles make it incapable to believe that a man could be the victim of abuse, or that another woman is capable of being the abuser. Heterosexism is the belief that heterosexuality is superior to homosexuality; this ties in directly with internalized homophobia. Many members of the gay community are resentful towards the discrimination they receive for being gay. This anger and frustration comes out in their personal lives, and they often take it out on their partner who is a manifestation of everything that society looks down on. (Crosbie-Burnett, Mourot, D. Potoczniak, M. Potoczniak 254-255)

“Because gay male relationships necessarily involve two men, there may actually be a heightened level of dominance and control observed among these couples.” (Landolt, Dutton 338) The traditional gender role for men is to be “dominant”. Men are supposed to be virtually emotionless; the only feelings they can express are anger and aggression. They are the ones in control, achieving success, and they are supposed to be the strength and support system in any relationship. When two men are involved in an intimate relationship, these basic male gender roles are put to the test. Naturally, one would assume that men would “butt heads”; it would be safe to say that there would be a constant battle for dominance in homosexual relationships between two men. (Landolt Dutton, 335-340) Domestic violence is a lot more severe than a simple fight, as statistics would indicate. In a study done on 2881 gay men living in 4 cities between the years of 1996 and 1998, anywhere between 12% and 36% reported some type of abuse in their relationships. Of those that reported violence, 34% experienced verbal battering, 22% were subjected to physical battering, and 5% reported sexual violence. Gay male abuse takes place primarily with men under 40. The study concluded that the numbers of men who were abused in some way, especially in urban cities, was higher than numbers of heterosexual men and possibly even women. It is obvious that action must be taken to stop this. (Greenwood, Reif, Huang, Pollack 1964) Physical abuse between men is quite serious: “One study found 79% of gay victims had suffered some physical injury, with 60% reporting bruises, 23% reporting head injuries and concussions, 13% reporting forced sex with the intention to infect the victim with HIV, 12% reporting broken bones, and 10% reporting burns.” (“Domestic Violence in Gay Couples”)

The issue of infecting a partner with HIV/AIDS is an interesting one, since the only reported occurrences are in the gay male community. Mike Fewel, a director of a Seattle AIDS support group reported a story about a client of his who was HIV-positive and being verbally abused and forced to leave his partner's apartment because his HIV status had put a damper on their sexual relationship. HIV has been used as an excuse to abuse one's partner, and it simply is not one. Fewel explains that he thinks "These were abusive relationships before HIV was a part of the relationship." (American Health Consultants 1) As explained by Patrick Letellier, a researcher with the Family Violence Project in San Francisco, HIV can be used as a weapon of control. He explains that abusive partners say such things as "If you don't do what I say, I won't let you go to the doctor. If you get sick, I'm going to be really mad at you." ("American Health Consultants") Letellier also explains that a partner with HIV is more prone to domestic violence, because he is sick, and that, in turn, would make him more susceptible to manipulation. A victim with HIV could also find it difficult to leave an abusive relationship because of the dependency on one's partner for care. ("American Health Consultants")

HIV/AIDS is often stereotyped as a disease that primarily affects homosexuals. While that is obviously not true anymore, a lot of homophobia still exists surrounding the issue of men with HIV/AIDS. A partner with a severe internalized homophobia problem could see a partner with AIDS as a "disgrace" to the community, and could use that as an excuse or outlet for abuse. Once again, the issue here is not that a partner is sick, it is that the abuser has a strong sense of self-loathing that he takes out on his sick partner. HIV/AIDS is merely used as an excuse for the abuser to justify his actions.

When examining abusive relationships, the question as to why the victims stay often arises. There is no distinct, singular reason as to why a victim would stay, since the circumstances vary greatly on a case-by-case basis; however, one can attribute such things as hope for change, co-dependence, naiveté, loneliness, and depression as some of the many reasons. In a study conducted by J. Michael Cruz, the highest reported reason for remaining in an abusive relationship was financial dependence. It's interesting that in a society where men are the dominant money-makers, some men still feel financially insecure. Many victims claimed that they were afraid that they wouldn't be able to pay the rent on their own. Some younger victims who were putting themselves through school also depended on their partners for tuition money. The second most frequent reason victims reported for staying with their partners was newness to the gay lifestyle. Mark, age 40, reported, "I had just come out, that was primarily it... (and I was) inexperienced with the gay lifestyle" (Cruz 8). John, age 25, claimed "Inexperience in other relationships, period" as his main reason for staying. "Not having anything to compare it to, and not knowing if that was normal." (Cruz 7) Love was another reason

used by many victims to justify staying in the relationship. Harry, age 32, explained that “You make excuses for it, or yourself, or ‘It’ll only happen this time,’ and stuff like that.” (Cruz 8) Many of the men agreed with Rob, age 30, who simply said, “I loved him.” (Cruz 8) In addition to love, hope that the behavior of the abuser would change was another frequent reason among victims. Victims convince themselves that the relationship would get better, and oftentimes they’d blame themselves and think that if they would change, their partner would change as well. In other cases as well, victims would focus too heavily on the good parts, often brushing off the bad. Fear of being alone is also a common reason for staying. Frank, age 41, claims “not wanting to be by myself” (Cruz 9) As humans, we have a fear of being alone and of isolation. Many people suffer from fear of abandonment, as James, age 34, says, “Because I had, you know, deep-rooted issues about abandonment.” (Cruz 9) Obviously, these are just some of the main reasons discussed by the participants in the study (25 gay/bisexual men between the ages of 23 and 43). As previously stated, abusive relationships vary greatly from person to person, so it’s impossible to tell every single reason why one would stay with an abusive partner (Cruz 1-9).

While the majority of material presented was focused on gay men, battering and abuse in lesbian relationships is just as common. “About half of the 3,327 domestic violence cases reported by gays and lesbians in 12 U.S. cities last year involved lesbian and bisexual women, according to a new report by the National Coalition of Anti-Violence Programs” (Mantilla 6). Examining lesbian relationships is an interesting study, because of the traditional gender-based theories that exist for women in abusive relationships. Most traditional views of domestic violence see the woman as a victim of misogyny and male-dominance. Obviously, in lesbian relationships, this is not the case. These gender-based views “create a situation where lesbian abuse is either seen as impossible or the lesbian perpetrator comes to be seen as male-like in order for the analysis to fit” (Ristock 331). According to Mona J. E. Danger’s review of Lori B. Girshick’s *Woman-to-Woman Sexual Violence: Does She Call It Rape*, “Violence is not about gender but about power and control.” (Danger 1084)

Similarly to gay men, many abusive lesbian relationships analyzed in a study done by Janice L. Ristock can be attributed to naiveté about gay relationships, as nearly half the women were abused in their first lesbian relationship. Participant # 17, Robyn, recounts her experience that is similar to many of the women studied.

“It was my first relationship. First long-term relationship. But you know I was—I was head over heels madly in love and I thought this was the relationship for life. And it started out really good. This woman was nine years older than myself. It was verbally abusive to start off with and then became

physically abusive. I quite often had black eyes and she tried—she almost killed me once. Strangled me and then this went on for three years. I was too young and insecure about the whole relationship—gay relationships, whatever.

Anybody could have walked all over me.” (Ristock 335)

Often times, an older partner who is more comfortable with being in a gay relationship, and who is more involved with the community will take advantage of a less experienced, newly-outed younger partner. This type of abuse does not come as a surprise to many, considering the bravery required to come out, and the fear and vulnerability that result in the aftermath of doing so. (Ristock 335)

Also revealed in studies done of gay male abuse is the occurrence of the “‘cycle of violence’... where violence occurs in a predictable cyclical fashion and intensifies over time. Part of the cycle includes a period of calm which follows an acute battering episode” (Ristock 335). It is explained that while the power dynamic between a man and a woman is very clear and defined, due to a man’s social advantages, the control between two women can fluctuate because they are both on an equal playing field, due to their equal social status. In lesbian relationships, there is also a much higher chance that the victim will fight back, whereas in heterosexual relationships, women rarely retaliate against their husbands/boyfriends. In Ristock’s study, 9% of the women fought back with the intention of harming their lover, 20% retaliated only as a form of self defense, and 11% finally had reached a breaking point (a specific battering that pushed them over the edge) that forced them to fight back. In Ristock’s study, she also mentions a study done by Marrujo and Kreger in 1996 that explains that, instead of there being only two defined roles in lesbian relationships, there can be a third which they call the participant. “A ‘participant’ establishes a pattern of fighting back against her abusive partner with the intent not just to protect herself (a motive with the assimilable into the pure victim category) but to retaliate (a motive that should perhaps trouble that category)” (Ristock 336).

Going along with power dynamic previously mentioned, Focus Group #3 touches on the issue of social power in accordance with race, and previous victims of abuse.

“I think racism is another thing we don’t talk about—the ways white women might use power over their partner who is a woman of color—there is power and control there...I’ve noticed in my practice in lesbian relationships where one is the survivor (of childhood sexual abuse) and the other isn’t. Then often in the part of her healing, she doesn’t want to be sexual any longer and we’ve got a partner who wants to be and a survivor who is saying “no”—would that qualify as sexual abuse? There is a power and control... it could get that way.” (Ristock 337)

It is interesting to examine how race plays a part in domestic violence, because it is a problem that's often over-looked. Social power can be very controlling, and that is evident in heterosexual relationships where the man holds the obvious social power, which puts the woman at a disadvantage to begin with. With one group being seen as "superior" by society, it would be easy for the "superior" partner to transfer the social dominance into intimate relationships. Sexual abuse is another interesting issue to examine, since the lines between someone being abusive and simply being forceful are not at all clearly defined. A victim of sexual abuse often has trouble with intimate situations, and this unwillingness to put forth sexually can result in abuse, due to their partner's frustration.

Heterosexism and internalized homophobia are also mentioned as possible catalysts of domestic violence. As Focus Group #5 so eloquently states,

"Domestic violence assumes marriage, assumes spousal relationships, assumes a lot things that do not apply to lesbians... so there is a problem with using that paradigm of domestic violence. The whole issue of heterosexism and homophobia in the relationship and sort of projecting maleness onto a partner or projecting issues around an abusive mother onto a partner with same-sex abuse. So I think those are issues—how those issues play out in the relationships—the issue of race and class—the power dynamics in the relationships—I think they are different than they are when I'm working with heterosexuals. But a fist is a fist. So the other part is entirely the same. Violence is violence and trauma is trauma." (Ristock 337)

Another story from a victim facing severe internalized homophobia and self-hatred is presented in Jenn Christiansen's article about lesbian battering.

"I look at my lovers and see how our lies mask our hatred of who we are... The lover of mine who turned all of our lesbian books with the titles facing the wall, so that no one would know who she really was... The lover who displayed all the right feminist and lesbian books to impress her more activist sisters... The lovers who so hate themselves, their own identities, that they could not face the truths about themselves that loving another woman revealed. And how does this self-loathing project onto one's women lovers, onto other lesbians? How much does our own denial and self-abuse hurt the women we love?" (Christiansen 2)

Internalized homophobia is an issue that is quite prevalent in both gay and lesbian abusive relationships. Homophobia is hatred or fear of gays and lesbians, and it is a problem that members of the gay and lesbian community face on a daily basis from those

outside the community. Having to deal with it from people within the community, especially one's domestic partner is not only ironic, but sad and frightening. For many gay and lesbian people first coming out of the closet, there is a period of self-loathing, and wishing that he/she was heterosexual instead. As with many other things, the time period of self-loathing can last only a few months, or it is something that can plague an individual his/her entire life long. When someone who feels this incredible self-hatred, they are often angry at themselves, and, without even realizing it, they take it out on the people around them, especially their partner.

Internalized homophobia is the root of the problem in gay and lesbian domestic violence. It is this hatred that stems the violence and bitterness that an individual holds against their partner. They take out their anger on their partners in various ways, whether it is through physical, emotional, or sexual abuse. It seems that self-loathing individuals will find a "weak" person—someone who's been abused, someone naïve about gay relationships, or someone who's just as self-loathing—and use this weakness to their advantage, as a means of manipulation and control. The victim, due to these circumstances that make them inferior and weak in the eyes of their partner, stays for various reasons that have been mentioned throughout. While this by no means justifies abusive behavior, it offers an explanation as to why it happens. Once the root of a problem is discovered, proper steps to end the problem can be taken.

Gay and lesbian domestic violence is a problem that is much more prevalent in today's society than anyone would like to admit. It is just as frequent, if not more so, than heterosexual domestic violence. Through education and exposure to the problem, the mindset of the abuser can be discovered and the proper steps can be taken to stop this issue in society. Once we acknowledge that same-sex domestic violence is, in fact, a huge problem in our society, we can address it and end it.

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