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A MESSAGE FROM THE DIRECTOR

The San José State University McNair Scholars Program is pleased to present the thirteenth SJSU McNair Scholars Research Journal. This journal represents the diverse and practical research experiences of the McNair Scholars during the 2016-2017 academic year.

I would like to congratulate the scholars for their hard work, dedication, and accomplishments during the spring course and in the summer research program. My sincere appreciation to the faculty mentors for their guidance, time, and commitment to the scholars, their research and the program. A particular word of thanks goes out to the families and extended support systems that made these outstanding presentations possible.

A special thanks to President Dr. Mary A. Papazian, Andy Feinstein Provost and Vice President for Academic Affairs, Stacy Gleixner Associate Vice President for Student Academic Success Services, and Pamela Stacks Associate Vice President for Graduate Studies and Research for their continuing support and encouragement given to both the students and staff of this program.

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Eric Nunez Aguilar

Major: Chemical Engineering

Mentor: Dr. Claire Komives

HIV-1 Protease Inhibitors From Marine Brown Alga: A Literature Review

Biography

Eric Nunez Aguilar is a junior at San José State University studying *Chemical Engineering with an* emphasis in biochemical engineering processes. Eric comes from a large Mexican American family he will be the first in his family to graduate from a four-year institution. Additionally, Eric hopes to be the first in his family to obtain an MD-PhD at a graduate school. Eric has a passion for research and has conducted biochemical and *biochemical engineering research* for more than three years. Eric's research interests are infectious diseases, protein engineering, bioinformatics, and marine pharmacology. Eric is particularly interested in the discovery and *development of bioactive* chemicals that can inhibit infectious diseases from maturation and potentially provide cures.

HIV-1 Protease Inhibitors From Marine Brown Alga: A Literature Review

Abstract

The human immunodeficiency virus type 1 (HIV-1) causes an infectious disease that if left untreated can progress to acquired immunodeficiency syndrome (AIDS) and be fatal. Finding a cure and more treatments for HIV has become a top priority in medical research, and due to the cost of synthetic HIV medication, finding a low-cost alternative is essential. Marine pharmacology has provided a possible solution to costly HIV medication through compounds derived from marine brown algae that inhibit the HIV-1 protease (PR). The objective of this study is to emphasize the necessity for further research in HIV-1 protease inhibition using marine-wildlife-derived compounds. In order to better understand the process of protease inhibitors, I will investigate the process of producing and purifying HIV-1 PR, extracting and isolating brown alga compounds. This study demonstrates the potential of marine pharmacology as an inexpensive alternative to synthetic pharmaceuticals for HIV-1 PR inhibition.

I. Introduction:

The HIV-1 is a viral infection that can be transmitted through direct exposure to infected bodily fluids. Global HIV and AIDS statistics indicate HIV has infected about 38.1 million people, with 36.9 million people and 2.6 million children seeking treatment. If HIV is left untreated, the virus can cause acquired immune deficiency syndrome (AIDS), which has caused about 25.8 million deaths due to AIDS-related illnesses. ^[6] HIV/AIDS is an illness people must live with for the rest of their lives. However, the medication to keep people healthy is quite expensive. ^[18] This makes a cure for HIV desirable, and researchers have been struggling to find a quick solution to prevent this virus from full maturation.

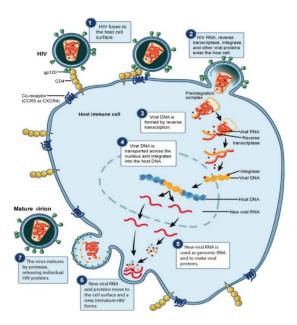


Figure 1: This diagram depicts the process in which a healthy CD4 T Cell is infected by HIV-1 and then used as a viral host to produce mature HIV-1 virions. (IMG: https://cooljargon.com/ebooks/biology/m44599/index.cnxml.html)

The process in which an HIV-1 virion infects its host, the CD4 T Cell, is through seven steps depicted by Figure 1. First, the virion must fuse to the cell membrane of the CD4 cell through the CD4 binding site—illustrated as 4 vellow circles on the CD4 cell—where the co-receptor will help fuse the viral membrane to the CD4 cell membrane. Once attached to the membrane, the HIV proteases (PR) within the virion cleaves the Gag and Gag-Pro-Pol polyproteins into the following matrix (MA), capsid (CA), nucleocapsid (NC), and P6. The PR is also responsible for cleaving enzymes such as more proteases (PR), reverse transcriptase (RT), reverse transcriptase-RNase (RT-RH), and integrase (IN). The proper cleavage of these polyproteins is essential for the maturation of a virion.^{[10][9]} Then, the PRs break away the capsid to expose the viral RNA, where reverse transcriptase will construct viral DNA, which integrase will insert into the host DNA. This results in a mutation in a CD4 cell that helps replicate viral proteins and RNA. This new viral RNA is transported to the walls of the CD4 cell by viral proteins in order to start the production of new, mature

HIV-1 virions that are released after maturation. This is where the CD4 host cell dies due to the crowding of the cell with virions, causing the cell to rupture and release large amounts of mature virions.

This process has allowed researchers to create preventative treatment and lifelong treatment for those already infected. The understanding of the mechanisms of HIV-1 infection has contributed to research in order to one day create a vaccine for HIV.^{[25][4]} In **Figure 2**, the current inhibitors in treatment are indicated in red text, along with additional vocabulary necessary for understanding the structure of the HIV-1 virion. The target for most medication for HIV-1 is PR inhibitors, since inhibiting the protease will prevent virions from reaching maturation before infecting the host cell. Other inhibitors can target the entry of the virion by inhibiting the virus-cell membrane fusion. ^[23]

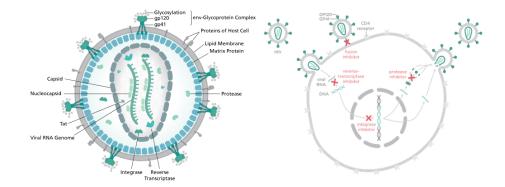


Figure 2: HIV-1 virion diagram depicting all essential components for infection of CD4 T Cell host (left). The inhibition of these components is essential in creating treatment and potentially a cure for HIV-1 (right).

(IMG: http://www.forbes.com/sites/quora/2016/09/29/these-two-promising-treatments-could-change-the-fight-against-hiv/#5f2ca215537b).

In this review, I will investigate the natural marine products used in HIV-1 PR inhibition in order to review the current understanding of how natural products are used in pharmaceuticals. I will look into the host system selection process, the production of PR, the isolation and characterization of PR from host cells, the extraction of bioactive chemicals from marine

plants, and the testing of the marine plant natural products HIV-PR inhibiting effects. This article will illuminate the interdisciplinary cooperation between biochemical engineering and natural product research to help provide a better understanding of current biotechnology for large-scale viral protease production and strengthen the knowledge known about marine-plant-derived pharmaceuticals.

II. HIV-1 PR production from bacterial vectors

The production of the PR is a long and tedious process that can sometimes yield little to no PR if using the wrong host cell body or other conditions are not met. The organisms available for protein synthesis that are readily available consist of bacteria, yeast, filamentous fungi, and unicellular.^[21] However, for this particular peptidase, the E. coli host system has been well documented and continues to show results in the literature. This section will review the production of viral protease from literature and look into the process of producing PR.

Production of PR from E. coli is a reoccurring theme in most literature on producing HIV-1 PR in recent years, and in this process the type of PR is selected based on the compatibility of the strain of E. coli to optimize the vield of HIV-1 PR.^[5] For example, Nguyen et al. used a gene sequence cloned from a Vietnamese HIV-1-infected patient to obtain a native HIV-1 protease gene. The HIV-1 PR gene then had to be amplified and ligated using polymerase chain reaction (PCR). This process makes sure the gene of interest is amplified and isolated. In this scenario, the PR gene is located in between the Gag and Pro gene. The PCR process removes Gag and Pro genes and amplifies the desired gene by using digestive enzymes that cleave these unwanted genes. The gene had to be modified to make purification much simpler by adding a 6X His tag to the C-terminus and had to be encoded with an auto cleavage site at the N-terminus using designed primers. Then, it was cloned into a pET32a (+) plasmid containing the HIV-1 protease-encoding sequence along with sequences encoding an auto cleavage site GTVSFNF at the N-terminus. The plasmid also contained a TEV plus 6× His tag at the C-terminus and was expressed using Escherichia coli BL21 DE3 strain as the host cell for the expression of this PR. Nguyen had 9 plasmids from which only the highest expressed plasmid was selected

for the *E. coli* transformation. Through this process, Nguyen et al. expressed about 4 mg of protein per liter of cell culture. This article provides strong evidence that production of the HIV-1 PR is expressed and cultured in the *E. coli* bacterial host system.

The process detailed by Nguyen et al. shows the possibility of obtaining this PR using *E. coli*, and this creates room for optimization of this process. Bashiri et al. indicates that the *E. coli* BL21 DE3 strain is problematic due to the leakage of expression in lac promoter and T7-based systems. He suggests that the BL21-AI strain might lead to tighter regulation in expression and using a rhaBAD promoter to increase protein accumulation, protein solubility, and cell fitness. As for affinity tagging, the 6XHis tag used in Nguyen's experiment can be replaced with fusion partners, which consist of fusion proteins that reduce cost in purification of PR and increase the yield of PR produced.^{[3][21]}

III. Purification and characterization of HIV-1 PR

This section will cover the purification process and will investigate current techniques used for characterization of the HIV-1 viral protease. Affinity column chromatography is a process in which proteins-which are removed from their host cells using lysis buffer to break the cell walls-are isolated from undesired compounds and contaminant proteins using high affinity resin beads in a column. This process consists of pumps that contain an elution and binding buffer, resin beads that bind to the 6XHis tag on the desired protein, and collection tubes to collect the desired protein. These components can all be found in a Fast Protein Liquid Chromatography (FPLC) instrument which monitors the compounds in the lysed and suspended cell pellet using a UV detector or specified light detector that can detect when a protein of a given or desired wavelength is being eluted from the column. Maseko and Nguyen both used column chromatography for purification and sodium dodecyl sulfate polyacrylamide gel electrophoresis for characterization of their proteases. This section will highlight both processes, along with current techniques that can strengthen their results.

Purifying PR using affinity column chromatography is a common technique used in the isolation of proteins from contaminants. Maseko et al. used a Q

Sepharose Fast Flow anion exchange (QFF) and GSTrap column chromatography. QFF columns bind to charged biomolecules, in this case, the HIV-1 PR and other charged proteins. This is why there is another column GSTrap that binds specifically to the glutathione S-Transferase (GST) tagged proteins. ^[14] Maseko used a different plasmid with his GST tag based on his HIV-1 PR. The last affinity column selectively isolated only proteins with the tag, which yields a higher purity in his final product. Nguyen et al. used a 2 Tandem QFF similar to what Maseko used in order to isolate all charged biomolecules. However, Nguyen then used a Ni-Sepharose column in order to isolate her HIV-1 PR with a 6XHis tag.^[16] The purification step of this PR demonstrates the importance of purification tags and purity in the final product. The two column steps help reduce the contamination in the PR final samples and help in concentrating the final product.

Characterization of PR using SDS PAGE and mass spectrometry is a common process for quickly analyzing the PR, the quickest being SDS-PAGE. Sodium dodecyl sulfate polyacrylamide gel electrophoresis SDS-PAGE is a common procedure, where protein samples are characterized based on the size of the protein. The accuracy of this process can be intensified if the size of the protein is known. Maseko et al. detail the PR sizes for his experiment by comparing his two PR variants with his control wildtype PR, which are 11.5, 11.6 and 11.7 kDa. ^[14] However, Nguyen et al. was only interested in the single band of approximately 13 kDa since she was not testing inhibition effects on other HIV-1 PR variants.^[16] The most accurate method to characterize a protein is through mass spectrometry. which is the detection of mass isotopes of a given molecule. The purity of the sample and control is paramount to getting the best results. The process of obtaining a mass spectra of a sample is long and tedious, consisting of method development and experiment runs that can take hours to process. Loo et al.^[12] demonstrate a mass spectra of the HIV-1 PR used in the experiment, where they detail the procedure of how they obtained their data (Figure 3). This procedure is essential in priming the mass spectrometer and prepping the PR samples.

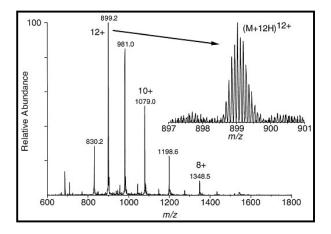


Figure 3: This image depicts the HIV-1 PR mass spectra, where you can note the isotropic resolution of this M+12H ion.^[12]

IV. Marine plant natural product extraction from marine wild life with potential anti-HIV properties

In the discovery of new pharmaceutical or nutraceutical compounds, these compounds must be either synthesized in a laboratory or extracted from the This section will look into the extraction of natural natural source. compounds from marine wildlife, and in particular, plants and algae that have pharmaceutical applications such as; antioxidants, anti-inflammatory, anti-viral/retroviral, and anti-fungal.^{[15][22]} This scale of extraction for pharmaceutical purposes would need to be conducted on a much larger scale if it were to be used for drug discovery research. Malve speaks of marine pharmacology as a viable source for alternative drug discovery for new illnesses emerging from marine microbes, which in this section pertains to marine alga. ^{[13][7]} Uzaira et al. indicate that microorganisms like alga have exhibited in-vitro inhibition of HIV-1 replication cell lines. [27][19] It is through marine organisms that most of the answers to infectious diseases can be found. However, there is still more research needed in this field to identify and isolate these compounds; Figure 4 illustrates the process and ways that these compounds are characterized.

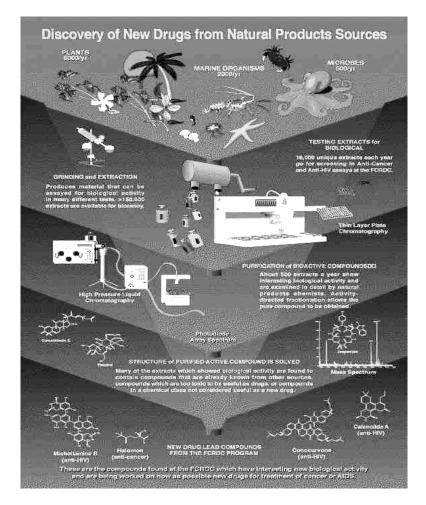


Figure 4: This picture illustrates the process of extracting, isolating and testing marine pharmaceuticals using characterization instrumentation like high performance liquid chromatography and mass spectrometry. (IMG: https://npsg.ncifcrf.gov/DISCOVER.JPG)

Potential viral protease inhibitors are found in algal natural products in the pacific coast of Japan and South Korea called *Ecklonia cava*. This brown, edible algae consists of phlorotannins; some are Eckol, 6, 6'-Dieckol, 8, 4"-Dieckol and 8, 8'- Bieckol. In particular, 8,8'-Dieckol is known to inhibit the protease more than all of the other derivatives because the inhibiting

effects on PR are greater than the other 3 phlorotannins, PR-IC50 81.5±9.6 μ M.1. This indicates that this algal derivative should be further investigated to determine whether it can be used for PR inhibition. Artan et al. mentions that 8, 8'-bieckol has a much higher inhibiting effect. ^[2] In this experiment, the extraction and isolation of 8, 8'-bieckol from Ecklonia cava is run by washing E. cava with water three times followed by drying 1 kg of the washed sample at 60° (for 12 hours. Following that, the dried sample is ground and then extracted with methanol (3x). This methanol extract is then dissolved in water and partitioned with n-hexane, which results in an aqueous layer that is partitioned with ethyl acetate. The organic solvent fraction is concentrated in vacuo and divided into ten fractions on a silica gel column chromatography (Merck, 230-400 mesh, 300 g) using trichloromethane-ethyl acetate-methanol mixtures of 50 : 2 : 1 (f. 1), 25 : 5 : 1 (f. 2, f. 3), 10 : 5 : 1 (f. 4—f. 6), 5 : 5 : 1 (f. 7, f. 8), 100% MeOH (f. 9, f. 10); 1 l each.^[2] The desired compound is obtained from fraction 5 through recrystallization in methanol/water. The information regarding the method for extracting this compound is essential in order to purify the compound out of E. cava. This compound can also be bought from 3B Scientific Corporation (3BSC SKU# PL074128).

V. HIV-1/2 PR inhibition analysis

Finding the right assay to quantify the results in inhibitor experiments can be tricky due to the desired conditions of the PR and marine natural product optimal conditions differing. Furthermore, determining the type and how much the natural product is inhibiting takes time, and sometimes the current method used is not the most accurate. This is where technology is involved and can determine whether an experiment is reliable based on the instrument used. In this section I will go over two assays: one that used high performance liquid chromatography (HPLC) to determine the inhibition effects and the fluorescence resonance energy transfer (FRET) assay that is commercially used in the pharmaceutical industry. FRET is measuring the amount of a particular compound given a specific wavelength that the compound can be detected in.

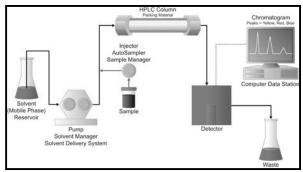


Figure 5: Process flow diagram of an HPLC and the components it has. (IMG: http://www.waters.com/waters/en_US/How-Does-High-Performance-Liquid-Chromatography-Work%3F/nav.htm?cid=10049055&locale=en_US)

The HIV-1 protease assay using HPLC: HPLC is an instrument used to measure the amount of compounds within a solution using a column that separates each compound; these compounds go through a specific wavelength, where they can be detected and quantified (shown in Figure 5). Ahn et al. used HPLC to determine the amount of hydrolysate and remaining substrate from her inhibitor reaction, where the HIV-1 PR cleaves this substrate and the products are hydrolysate. The following conditions were set for this experiment: column, Inertsil ODS-3 (4.63150 mm, GL Sciences Inc., Japan); elution, a linear gradient of CH3CN $(15\rightarrow 40\%)$ in 0.1% TFA; injection volume, 20 ml; flow rate, 1.0 ml/min; and detection, 280 nm. The retention time for hydrolysate and substrate to be eluted is at 8.61 and 10.84 min, respectively. To determine the inhibition activity of the compound in PR, reaction was calculated using this equation: % inhibition = 100X (Acontrol-Asample)/ (Acontrol), where A is a relative peak area of the hydrolysate; Acetyl pepstatin (Bachem AG) was used as a positive control in this assay.^[1]

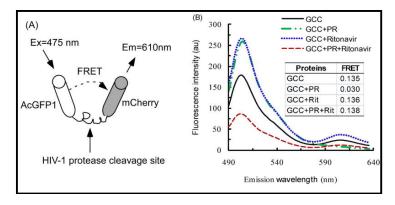


Figure 6: This diagram illustrates how the FRET assay works and the proper way of running controls and experimental trials. (A) This substrate fluoresces at an excitation of 475nm and an emission at 610nm, where if there is activity the substrate will not fluoresce. (B) The substrate (GCC) was tested by itself, substrate + protease, substrate + inhibitor (Ritonavir) and substrate + inhibitor + protease.^[8]

The HIV-1 PR activity can also be analyzed using the fluorescence resonance energy transfer (FRET) assay specifically meant for testing HIV-1 PR inhibition compounds. The FRET HIV-1 PR assay works by using a substrate that fluoresces at a given excitation and emission wavelength. HIV-1 PR is determined to be active if there is no fluorescence, since the whole substrate must be intact to fluoresce. This FRET assay is used in industries to screen several HIV-1 PR inhibitors and is commercialized, making this a readily available option when screening for HIV-1 PR inhibitors.^{[8][29]} This method is more preferable than HPLC since running HPLC can be costly and takes more time to run effectively. The accuracy of a HPLC is what makes the HPLC method desirable; with FRET, the accuracy is more of a quick way to screen through several inhibitors. This is why using both would be beneficial by using FRET assay to screen through several marine natural PR inhibitors and then run a HPLC assay for the inhibitors that made it past the screening.

VI. Discussion

The literature in this review contributes a foundation to marine pharmacology and HIV-1 research. Nguyen's contribution to HIV-1 PR expression and production allows for reproducing the same method for

future experiments like HIV-1 PR inhibitor simulations that are crucial in understanding the structural change of a PR when present with an inhibitor and catalytic response after HIV-1 RNA direct interaction.^{[19][17][20]} Maseko and Nguyen both provide sufficient information to optimize current HIV-1 PR purification processes, suggesting new forms of purification like fusion protein tags, using different plasmids with better binding affinity for column chromatography.^[24] Artan provides an extraction process that can be used to extract other algal natural products that have been used by other marine pharmacology researchers.^{[26][28]} Additionally, HIV-1 PR assays have been created by researchers like Ahn's HPLC assay and Zhu's FRET assay; this creates a platform for testing inhibitors at a small to large scale. These contributions are what establish potential drug components in HIV-1 PR medication. These contributions to marine pharmacology and HIV-1 research are just the building blocks for new and improved processes for nutraceuticals.

The strengths and weaknesses of the literature can be addressed through further research in each process. The expression and production of HIV-1 PR can always be optimized through further investigation in plasmids with better binding affinity tags and designing primers that can amplify the PR gene more efficiently. The selection of better E. coli strains through large scale screening of different strains that do not have the leakage problems like T-7 and lac promoter strains. This can be addressed by screening through strains with a rhaBAD promoter to increase protein accumulation, protein solubility, and cell fitness. Purification and characterization of HIV-1 PR can be optimized by replacing affinity tags with fusion protein that can significantly reduce cost, and using SDS-PAGE and mass spectrometry together to characterize PR will only strengthen the literature. Extraction and isolation of marine plant natural products can be optimized by using industry-grade plant extracting units to provide for better purity and additional controls for conditions specific to each compound. The HIV-1 PR assay development has been optimized through FRET and HPLC methods that detail the processes and controls using reliable instrumentation that are standard in research. The next steps in HIV-1 PR protease inhibitor research would be to further investigate other marine organisms and test their inhibitor activity of HIV-1 PR.

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Sophia Alcala-Cabrera

Major: Psychology

Mentor: Dr. Elena Klaw

From Stigma to Standing: The Effects of Peer Leadership Participation on Student Veterans' Ideas About Self and Others

Biography

As a first-generation college student, Sophia knew she was going to have to work hard to achieve the kind of success that she envisioned for herself. She was born and raised in Salinas California. She is one of six children in her nuclear family. Sophia is currently in her 4th year at SJSU and will graduate in the Fall of 2017 with a BA in *Psychology. Sophia is currently* working as an EOP mentor assisting first-generation, lowincome, and educationally disadvantaged students with academic and personal support. Throughout her years at SJSU Sophia has also worked as a research assistant for Dr. Barrera, math tutor, EOP event planner, and Summer Bridge resident assistant, as well as a dance and gymnastics instructor. After graduation Sophia plans to continue her education in social psychology. In Fall 2017, Sophia plans to apply to seven Ph.D programs nationwide with mentors that focus on stereotypes, stigma, and minority populations. Sophia's biggest inspiration and purpose has been her family. All her hard work and achievements are dedicated to them.

From Stigma to Standing: The Effects of Peer Leadership Participation on Student Veterans' Ideas About Self and Others

Abstract

The Veterans Embracing Transition (VET) Connect Peer Leadership Program is a University-based effort to assist student veterans in transitioning to campus and civilian life. Peer Leaders receive training to provide outreach to educate the campus community about the needs and perspectives of veterans (Klaw, Li, Avalos, & Diaz, 2016). As part of a larger project exploring the effects of VET Connect, exploratory findings in qualitative research indicate that through their participation in VET Connect student veterans gained a sense that civilians do indeed care (12, 92%) about veterans. Over half of the participants (8, 61%) reported changing ideas about themselves as veterans, seeing themselves at first as "not needing anybody" and then discovering that relationships were important to their sense of self. In their services as peer educators, these students discovered that they were not significantly different from other SJSU students as diverse and varied individuals. This study was conducted in collaboration with Jemerson Diaz. We worked on independent research questions and observations using data derived from the same larger study simultaneously under the supervision of Dr. Klaw.

Introduction

Currently, over one million veterans are receiving VA education benefits, known as the GI Bill, to pursue college diplomas, advanced degrees, or vocational training (Veteran Affairs, 2016). As the number of student veterans increases, colleges need to become more equipped to provide support services for this diverse population. One of the most predominate challenges veterans face according to Rumann & Hamrick (2010) is transitioning into a college environment. The reason many struggle to integrate is due to social barriers, such as not relating to civilian college students. In a college environment, it is probable that student veterans face challenges in having to interact with civilian students (Brookover, 1945). The American Council on Education reports (Radford,

2009) that 85% of college student veterans are at least 24 years old, and over 60% have a dependent spouse or child. Student veterans and traditional college students appear to have different lifestyles, which may be a part of the reason for differences in interests, social interactions, and interest in engaging with each other (Rumann & Hamrick, 2010) Difference in lifestyles may also lead to civilians and student veterans holding inaccurate ideas about each other.

This study was conducted in collaboration with Jemerson Diaz. We worked on independent research questions and observations using data derived from the same larger study simultaneously under the supervision of Dr. Klaw.

Civilians' Views of Veterans

For civilian students, understanding student veterans may be a challenging experience. In a study by Hawn (2011), the "culture gap" between civilian students and student veterans was analyzed in her classroom. Hawn was interested in viewing whether classroom interactions between civilian students and veteran students encouraged a greater understanding of each other's differences. Hawn found that there is a difference between military culture and civilian culture, which is one of the reasons why this "culture gap" exists. According to Casey (2015), civilian students may have a difficult time accepting veterans into civilian society due to oversimplified views regarding the combat experience. Other studies also mentioned that civilians may have distorted views about violence perpetrated by veterans and may see military life as demoralizing (Casey, 2015). Another study by Brookover (1945) found that civilians often assume that veterans who integrate back into society experience serious issues with adjustment and mental disabilities.

Student Veterans Disconnect From Civilian Students

Student veterans are a unique set of students who have experiences that others may find difficult to understand (Jones, 2014). Nonmilitary students have not faced the same circumstances as military students, therefore there tends to be a social disconnect (ASHE Higher Education, 2011). Student veterans may feel that not many others share common experiences with them, thus resulting in a detachment in personal

relationships (ASHE Higher Education, 2011). According to Jones (2014, veterans had a challenging time reconnecting with civilian friends. In this study, feeling alone, overwhelmed, and having difficulty relating with other college students was a theme that arose. At times, the student population appears to have difficulty accepting what student veterans have experienced, thus creating social barriers. Some may view veterans as killers and as violent, which can cause difficulty when creating connections in an integrated college campus (Pentland & Rothman, 1982). One of the probable reasons for social disconnection is due to unique issues student veterans may be facing. According to U.S. Government Accountability Office (2013) veterans transitioning back home are more likely to face challenges related to relationships, legal issues, and substance abuse compared to nonmilitary students. It is common for veterans to feel that no one understands them; feelings of social isolation may lead to an increase in self-exclusion. As noted in Ackerman, DiRamio, and Mitchell (2009), some veterans state that they are no longer sociable people, and in addition, some report that their experiences in the military had hardened them. Student veterans also report having issues with anger, substance abuse, post-traumatic stress disorder, depression, and other mental disorders, which can potentially increase social barriers between veteran students and nonveteran students (Ackerman et al., 2009).

Support Services

According to Radford (2009), data available from the 2007–2008 academic year shows that military-connected students or "military undergraduates" represent approximately 4% of undergraduate students nationwide. Despite the fact that military-associated students make up a significant part of the population, they are less likely to seek support services because seeking support is most commonly associated with signs of weakness (Bonar & Domenici 2011). It is vital to create outreach programs in order to form a social connection between student veterans and the college community. As noted in Bonar and Domenici (2011), outreach programs appear to be less common than those offered to African Americans, Latinos/as, International students, LGBTQ students, or students with body image concerns. Although outreach programs are not commonly offered for student veterans to the extent they are offered to other minority

groups, it is important that outreach programs are created and offered due to the vital support and difference they can make in a student veteran's college experience. As reported by Ford, Northrup, & Wiley (2009), it is often challenging to create opportunities to increase the educational success of military student veterans, but it is imperative to continue developing outreach programs. It appears that support programs can be effective in decreasing the social barriers college veterans face while attending a university (Ford, Northrup, Wiley, 2009). In addition, support programs can also assist student veterans in adjusting and being successful in a college environment (Ford, Northrup, & Wiley, 2009).

The Larger Project Veterans Embracing Transition (VET Connect)

The Veterans Embracing Transition (VET) Connect Peer Leadership Program is a university-based effort to assist student veterans in transitioning to campus and civilian life. Peer Leaders receive training to provide outreach to educate the campus community about the needs and perspectives of veterans. A qualitative study was conducted in order to analyze the ways in which the VET Program reduced participants' sense of isolation by connecting student veterans to university faculty and staff, to other student veterans, and to the general student population. Participants expressed that the VET Connect Program promoted self-growth and integration, allowing them to transition to campus and civilian life. Participants reported developing skills such as public speaking and improved knowledge of campus resources, as well as insight into their emotions. Participants also reported experiencing a renewed sense of purpose through participation in the VET Connect Program.

Veterans Embracing Transition (VET Connect) and the Current Study

The current study focused on analyzing the qualitative data derived from interviews with participants in the larger study in order to understand the ways in which VET Connect may assists student veterans in breaking down stereotypes others may have of them and stereotypes they may have of nonmilitary students.

Methods

Participants

Thirteen of the 22 students who served as VET Connect Peer Leaders responded to email requests to participate in a brief individual interview regarding the effects of the program. All interview participants were male. All branches of services were represented, with the exception of the Coast Guard. In terms of age, 38.4% of participants (5) were between 18 and 30, 30.7% (4) ranged from 31 to 40, 15.4% (2) reported their age between 41 and 50, and 15.4% (2) stated they were older than 50.

Procedures

VET Connect Peer Leaders conducted interviews. Six were conducted by phone and the rest in person. A semi-structured interview guide was used. All interviews were transcribed verbatim and identifying information was removed. Interview responses and data from the larger study were gathered to show broad benefits of the VET Connect program. The research team employed Grounded Theory, an iterative approach to analyzing qualitative data in order to identify primary themes.

Current Study

The current study explored the transcripts from the larger study to assess the extent to which participation in VET Connect challenged participants' ideas about themselves as veterans and their ideas about civilians.

Analysis

A research team consisting of three student veterans and the primary investigator analyzed transcript data iteratively through a Grounded Theory Approach to qualitative analyses (Straus & Corbin, 1990). Recurring themes and subthemes in the transcripts were identified by each of the researchers. Two of the student assistants counted the occurrence of each theme and subtheme in each transcript. Prototypical quotes were identified for each theme and subtheme.

Findings From Current Study Quotes on Feeling "Heard" (P6, P8, P12, P15)

During the interview process, all 13 participants (100%) noted feeling "heard" as a result of conducting presentations as Peer Leaders. The participants expressed their sense of being heard in several forms by stating they enjoyed vocalizing their feelings: "It made me feel better about myself," "It's self-satisfying. Self-Pride," "It made me feel seen." Examples of interview responses are listed below:

"It... It made me a bit happier, because I was uh... .. I felt being part of a community besides being in my own head. I guess... seen ... it made me feel seen." (P15—Question 7)

"Um, I kind of feel like I was being heard, like they were acknowledging me." (P11—Question 12)

Quotes About Changed Ideas About Self As a Veteran (P1, P6, P8, P12)

Over half of the participants (61%) reported changed ideas about themselves as veterans, seeing themselves at first as "not needing anybody," and then discovering that relationships were important to their sense of self. Participants (54%) noted that military values to "suck it up and drive on" were no longer adaptive. The participants vocalized their changed ideas in numerous ways: "It makes me feel that I am needed," "It was actually therapeutic." Examples of interview responses are listed below:

Not needing anybody

"At first I guess I was pretty dismissive about it; I didn't know how I was going to feel at first talking about the issue, but at the end it was actually good." (P6—Question 7)

"At first it made me feel pretty bad, because I mean the things and the emotions that I've repressed for a long time—they had to be talked about and when I do talk about it I would be drinking and that would make it worse. When I initially started talking about these things and vocalizing my feelings it made me feel pretty bad, but after a time it got easier and in the end it really helped me. (P6—Question 7)

"Most veterans and guys in general don't want to be put out there, you know, in a vulnerable position, especially if you got hurt in the past whatever kind of trauma that you've been through. But you got to be able to show them that you can break down some walls, you can show some personal things because if you cannot show this vulnerable side of you, it's hard to experience the important things in life later on such as trust, love, care for another person. Otherwise you're always in this protection mode where you want to keep people at bay, you always want to watch what people are doing, you're always in this vigilance type of mode. And it's kind of, we honestly don't like that kind of mode all the time. Because it's not always necessary; it might be necessary in some cases but it's not always necessary in real life situations. Always be on guard ready to fight." (P1—Question 9)

Suck it up and drive on

"I think that in the military in particular we're taught that that's not supposed to matter and you're supposed to just brush it off and when you're out and you're not in the military anymore that doesn't really apply, and I think it just shows that other people are going through it too and it's ok to talk about stuff." (P6—Question 7)

"Most veterans I've noticed are a bit shy to talk about certain things like that because it's, um, because if they experience trauma in a battle or in a combat zone it's more, it's a lot of stuff most people wouldn't want to talk about." (P1—Question 7 and 8)

Quotes About Changed Ideas of Civilians (P1, P4, P5, P6, P12)

Thirteen of the participants (100%) reported changed ideas of civilian students. Participants (92%) reported gaining a sense that civilians do indeed care about veterans. Participants also indicated that veterans were not that different from civilian students. The participants vocalized their changed ideas in numerous forms such as, "I think it helped to broaden their perspective," "I think it provoked interest," "I think it really affected them." Examples of interview responses are listed below:

Do indeed care

"My aha moments came when I connected with non-veterans through my artwork, where I was able to engage them where they were really touched and they were really moved by that." (P4—Question 15)

"When I'm talking to these students it's a totally unbiased opinion about it; they didn't have anything to say, they didn't have any bad opinion about it; they treated me like a family" (P6—Question 7)

More similarities than differences

"I think a lot more [students] were able to see that they also had certain similar experiences." (P18—Question 11)

"I was speaking to the classes—I think it was a senior seminar psychology class—and there were no veterans in that class; well actually there was, I was a veteran in that class. But I was able to speak to the students and it really ... I feel like it gave them a different perspective, a new perspective on veteran problems because I wasn't just a number or just case study; I was actually a student and for all intents and purposes could have been sitting next to them in class." (P6—Question 11)

Implications

The current study demonstrated the positive effects VET Connect has on altering perceptions veterans might have of civilians and of other veterans. Participants expressed that the VET Connect program advocated stepping out of their comfort zone and getting to know others at the university. Participants reported that they gained others' perspectives. Participants also reported having a renewed sense of understanding toward civilian students. Overall, the findings suggest that VET Connect may serve

as an impactful resource to student veterans in higher education as it contributes to an understanding of other students' perspectives. Increasing the understanding between student veterans and civilian students is vital because it may lead to meaningful relationships that will allow veterans to successfully integrate.

Limitations

Although the current study focused on the ways in which the Veterans Embracing Transition Program assists student veterans in breaking down stereotypes others may have of them and stereotypes they have of nonmilitary students, the information found in the current study was conducted from a larger qualitative study. The sub-data in the current study were collected from a broad set of data regarding the overall benefits student veterans gained from participating in VET Connect. The small sample size precludes generalization, but current findings suggest that research on the VET Connect Program provides insightful exploration of the true experiences of the student veterans interviewed.

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Jemerson Diaz

Major: Psychology Minor: Communications Studies

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From Caution to College: The Effects on Veterans with Self-Reported Trauma Symptoms Sharing their Experiences with the Campus Community

Biography

Jemerson Diaz is a graduating senior with a BA in Psychology and a minor in Communications Studies. He is one of the copresidents of the SJSU Psi Chi Chapter, an International Honors Society for Psychology. He has been awarded EOP Honors and is a Dean's Scholar and the recipient of the Spring 2017 College of Social Sciences (CoSS) Charles Burdick Scholarship Award from the CoSS Dean's Office. He serves the campus community as a Mental Health *Ambassador as well as the campus* community as the Veterans Embracing Transition (VET) Connect Peer Manager. *He is currently doing research on* military acculturation with Dr. Shannon McCaslin and Dr. Ellen Herbst at the Palo Alto and San Francisco Veterans Affairs (VA). His plans are to pursue a Master's in Public Administration in order to build the skills necessary to develop his own non-profit organization designed to allow individuals labeled with psychological disorders to take ownership and fight the stigma set upon them by cultural and social norms.

From Caution to College: The Effects on Veterans with Self-Reported Trauma Symptoms Sharing their Experiences with the Campus Community

Abstract

Over 900,000 veterans are using benefits for higher education today; the vast majority of them served in the Global War on Terrorism (GWOT). Over 25% of GWOT service members that have been treated by the Veterans Affairs (VA) are reported to have symptoms of posttraumatic stress or posttraumatic stress disorder (PTS/PTSD). PTS/PTSD negatively impacts student veterans' abilities to navigate stressful environments such as college and university settings. The Veterans Embracing Transition (VET) Connect Program at San José State University (SJSU) is designed to connect veterans with non-veterans as peer educators. Five of the 13 VET Connect peer educators (38.5%) who were interviewed reported having symptoms of PTSD. Through their service as peer educators on and off campus, these participants demonstrated signs of healthy coping effects through sharing experiences and educating non-veterans of the struggles related to military culture, service, combat, and loss. This study was conducted in collaboration with Sophia Alcala. We worked on independent research questions and observations using data derived from the same larger study simultaneously under the supervision of Dr. Klaw.

Introduction

Over 900,000 veterans are using the benefits they earned through serving for higher education in colleges and universities today (U.S. Government Accountability Office, 2013). There are veterans in college that have been exposed to firefights, improvised explosive devices (IEDs), vehicle-borne improvised explosive devices (VBIEDs), and mutilated bodies of their fellow warriors, the enemy, and innocent victims. Due to this type of exposure, posttraumatic stress disorder (PTSD) is prevalent in college veterans, affecting 46% of a sample of 628 student veterans in a national survey (Rudd, Goulding, & Bryan, 2011). Deahl, Klein, and Alexander (2011) report that service-members who re-deploy into combat

theatres are three times more likely to develop symptoms of PTSD than those who deploy only once.

Veterans with posttraumatic stress or posttraumatic stress disorder (PTS/PTSD) have unique difficulties when transitioning from military culture to the civilian life. Many student veterans who face psychological distress resort to isolating themselves from the public (Glover-Graf, Miller & Freeman 2010). It is important that student veterans with PTS/PTSD learn how to cope with past traumatic memories and/or events in order to integrate into college and have a successful transition into the overall civilian community (Ness, Rocke, Harrist, & Vroman, 2014). The objective of this paper is to explore what factors may contribute to healthy coping among service members with PTS/PTSD in a public college university atmosphere. This study was conducted in collaboration with Sophia Alcala. We worked on independent research questions and observations using data derived from the same larger study simultaneously under the supervision of Dr. Klaw.

Symptoms of PTS/PTSD and the College Setting

Some symptoms of PTS/PTSD may include flashbacks, triggered distress, triggered physical reactions, avoiding related thoughts or atmosphere(s) of the traumatic event, self-blame, negative beliefs against self and others, loss of interest in activities once enjoyed, irritability, aggressive behavior, hypervigilance, feeling emotionally numb, being easily startled, variable levels of concentration, and signs of disturbed levels or lack of sleep (Bovin et al., 2016).

Although the university setting is not a combat theatre, stress factors such as social isolation, frustrations among "limited perspectives," and poor work ethic among fellow college students can trigger student veterans with PTS/PTSD (Ness, Rocke, Harrist, & Vroman, 2014). Understanding the basics of PTS/PTSD symptoms allows for improved recognition, comprehension, and interaction between non-veteran students/faculty that do not have this condition and student veterans that do have PTS/PTSD (Ness et al., 2014).

Sharing Experiences

Veterans that have experienced intense stress while in the military tend to keep that stress held inside when they return home (Seal, Bertenthal, Miner, Sen, & Marmar, 2007). Sharing stressful experiences with concerned individuals who listen is important for veterans to transition effectively to social activity, civilian life, and to the new college university setting (Russell, 2013). Research shows that when people express themselves in ways that reveal their vulnerability, internal growth and strength begin (Asmundson, Coons, Taylor, & Katz, 2002).

Campus Resources for Student Veterans

There are campus resources for student veterans across the U.S. on public and private universities (Cook & Kim, 2009). For SJSU, the Veterans Resource Center (VRC) located in the Student Union is available for veterans to access educational and supportive benefits such as the Montgomery G.I. Bill, outreach programs for assisted living, housing allowance, computer usage, printing, study lounge, and general veteran camaraderie (Military and Veteran Student Services, n.d.).

The services provided at the SJSU campus along with the majority of campuses nationwide focus on serving student veterans (Rumann, & Hamrick, 2009). Although these programs have positive intentions, unfortunately many student veterans choose not to take advantage of them for reasons that include several aspects of military culture (Badger, & McCuddy, 2014). One trait of military culture revolves around the idea that service members do not want to be helped; rather, they want to serve (Hall, 2011).

Student veterans that face psychological distress are able to access counseling services on campus (Rudd, Goulding, & Bryan, 2011). Studies have found however, that counseling alone is not sufficient for increased growth, development, and integration in individuals that face distress (Vera & Speight, 2003). One method that has been found to develop a strong foundation regarding integration in higher learning is peer-to-peer mentorship (Colvin, J. W., & Ashman, M. (2010).

Veterans Embracing Transition (VET Connect)

The VET (Veterans Embracing Transition) Connect Peer Leadership Program is a peer education program for student veterans at

SJSU developed by Dr. Elena Klaw. The ultimate goal for VET Connect is to act as a vehicle for reintegration into the community, specifically the university campus. VET Connect Peer Leaders are expected to educate the public through means of public speaking, workshops, and interpersonal connections.

A qualitative study was conducted from 2015–2016 to see the major overall effects and benefits that the VET Connect Peer Leaders gained throughout the past five years since the establishment of the program. The major themes that were found were **Increased Connection**, **Increased Self-Growth and Integration**, and an **Increased Sense of Purpose** among 100% (13 out of 13) of the VET Connect Peer Leaders that participated in the study.

Overall, the findings suggest that VET Connect may serve as a potent high-impact practice that engages veterans in higher education and reduces the loneliness and distress that often accompanies the transition from the military to the civilian world.

The Current Study

VET Connect acts as a platform for student veterans to express themselves verbally. The participants spoke on panels, directly to students, and conducted interactive workshops. This atmosphere allowed the participants to express themselves emotionally and share stressful experiences with a non-veteran community that was willing to listen to their stories.

The research revolved around the following research question: How does participation as a peer educator affect the experiences of student veterans that have self-reported symptoms of PTS/PTSD?

Methods

The Larger Study: Participants

Out of 22 VET Connect Peer Leaders, 13 agreed to be interviewed either in person or via telephone. All of the participants identified as male. The branches that were represented included the U.S. Marine Corps, Navy, Army, Air Force, and the National Guard. Thirty-eight percent of the participants identified below the age of 30, 31% identified as above 30 but

below 40, 15% reported as above 40 but below 50, and 15% reported to be older than 50 years old.

The Current Study: Participants

Five of the 13 participants who served as VET Connect Peer Leaders who were interviewed in a qualitative setting self-reported symptoms of PTS/PTSD. One hundred percent (5) were male, 60% (3) represented the Marine Corps and 40% (2) represented the Army. In terms of age, 20% of participants (1) were between 18 and 30, 60% (3) ranged from 31 to 40, and 20% (1) reported his age between 41 and 50. Eighty percent (4) of the participants have served in a combat theatre.

Procedures

One VET Connect Peer Leader conducted the majority of the interviews either in person or by telephone. A structured interview guide was used to gather qualitative data. Once the interviews were recorded, they were then transcribed verbatim onto a shared document. Any type of identifiable information was removed in order to protect the identities of the participants. Interview responses and data were gathered to show broad benefits of sharing stressful experiences through the VET Connect program. The current study identified five transcripts in which participants reported symptoms of trauma.

Analysis

In regards to the larger study, the original research team comprised three student veterans. All three of these research assistants participated in gathering data via interviews either through the telephone or in person. Two of the research assistants transcribed the data verbatim. Afterwards, under the supervision of the primary investigator, themes and subthemes were derived and identified.

In regards to the current study, the leading researcher was the primary lead to identify the transcripts that contained qualitative data of self-reported PTS/PTSD. The transcripts that were set aside were further examined to derive themes that were identified in this sub-group of participants.

Findings: PTS/PTSD Symptoms Report

Five of the 13 (38%) participants displayed signatures of PTSD and/or trauma symptoms based on the data gathered during the interviewing process. The participants vocalized having PTSD in several forms: clearly stating they have PTSD, had gone through PTSD therapy, having gone through a "traumatic experience," reports of "PTSD issues," and reports that lead to the conclusion of having trauma symptoms. Some of the participants within this group have PTSD due to combat, others are due to reasons that have not been shared. Examples of interview responses are listed below:

"One thing I conducted was...this PTSD workshop...I've gone through PTSD therapy...you're [referring to himself] always in this vigilance type of mode."

"Mine was a pretty traumatic experience [in reference to what experience this veteran shared with mainly non-veteran students] ...the emotions that I've repressed...when I do talk about it I would be drinking and that would make it worse...I was pretty dismissive about it [sharing his experiences]. I was having issues...PTSD issues...I was the guy sitting at the back of the class...I lived the life in combat, I have nightmares and other issues...my family and I had never talked about my combat experience."

Themes

The following themes were identified in the subgroup of the larger study that reported having symptoms of PTSD. The themes identified in the interview data are based on the responses of these five participants. All primary themes identified in the interview data were found in 100% (5/5) of the interview transcripts, suggesting that VET Connect Peer Leaders experienced common benefits. Participants reported **Increased Vulnerability in Interpersonal Interactions** at the university through enhanced relationships with faculty and staff, fellow student veterans, and civilian students.

"I did enjoy that [facilitating the campus-community forum]. Because...I wanted to let veterans or anyone else know that it is ok to be in a vulnerable position."

"I've been avoiding interacting with anybody as much as possible. I tried to limit it to only necessary interactions. [Serving at a Vet Connect Peer Leader] made me a bit happier, because I felt being part of a community...it made me feel seen."

Participants noted **Increased Support for Coping with Symptoms** through public speaking, expanded self-understanding, and greater acceptance of their own experiences. Through feeling "seen," realizing that "it's ok to talk about," and through "exposure," these active student veterans realized that the majority of non-veterans did not act "biased" towards them.

"...they [the students] saw me struggle through it [the traumatic experience], I think it helped them realize that it was ok to talk about stuff, that it was ok to feel bad about it, to feel sad about it for a while..."

"...instead of constantly feeling when I say something wrong people are going to see me for what I am, you know. I just [was] always thinking that they were going to see what I've been trying to hide...and realizing it is not the case."

Participants reported developing an **Increased Motivation for Integration** in VET Connect through serving the campus at large, by "making a difference" in the lives of fellow veterans, and by feeling "needed" within the program. All participants were glad to have the opportunity to "engage" their classmates in understanding the perspectives of veterans, and to mentor and provide advocacy for other veterans to access benefits and resources, and to help ease the isolation and distress of fellow military students.

"It gives the guys courage to...put himself out there...because we were taught to 'suck it up and drive on'..."

"...being a VET Connect Leader was a different experience because I was actively trying to make myself better."

Discussion and Implications

Most programs designed for student veterans on university campuses nationwide provide benefits and services (Rumann, & Hamrick 2009). These benefits primarily include opportunities for veterans to utilize monetary benefits for school, housing for homeless veterans, healthcare, and compensation for medical claims. One major issue of the low turnout rate for these programs may be due to the idea that veterans have developed a culture of serving their country for a cause greater than themselves (Badger, & McCuddy, 2014). When transitioning to the civilian student life, the desire to serve may still exist (Hall, 2011). Unfortunately, many services are aimed at serving the veterans rather than giving veterans the opportunity to serve others.

VET Connect has become a platform for student veterans to serve their community on campus. Service members have a service-oriented mentality. This desire to serve must be nourished consistently, especially as these women and men transition back to the civilian-oriented life style. The idea of receiving "help," "service," and "a lending hand," is not commonplace in the military (Hall, 2011). Veterans may very much still have that great desire to serve the community, to help others, to be social, and to share their experiences. Programs such as VET Connect are necessary for student veterans to give and share their abilities, wisdom, and experiences with society as a whole.

The VET Connect Program at SJSU is one outlet for student veterans to express themselves as human beings. It has also allowed former service members to feel internal gratification through serving their community. The program continues to be a platform for student veterans to educate men and women that have not been in the military. As more veterans participate in this program, more will reap the intrinsic benefits of serving the campus society. More integration into VET Connect creates an atmosphere of improved transition and decreased isolation for veterans.

Limitations

Although this study focused on student veterans that had PTSD, the small sample limits generalizations. This sub-data was gathered from a broad set of data regarding the overall benefits student veterans gained from

participating in VET Connect. The researchers in this study did not diagnose or ask whether or not the participant has or had PTSD. Determination of PTSD symptoms was based purely on participants' voluntary admission and subjective descriptions of symptoms that correlate strongly with PTSD.

Five participants were the focus group of this study. As this was a qualitative study, the different levels of PTSD are difficult to distinguish. Quantitative questions that determine PTSD would have allowed the researchers to have improved reliability and validity of PTSD in student veterans.

Future Research

Feedback from new student veterans and the campus community is important to sustaining programs such as VET Connect. One major goal for universities is to create an environment for veterans to be fully integrated with non-veterans. Veterans tend to isolate themselves with fellow veterans primarily because they can relate with each other. This behavior is not ideal for veterans because in the workplace, most workers are not military veterans. The conflict of military culture and civilian culture can be devastating for both parties.

In order for strong integration between military culture and civilian culture to exist, it must begin before veterans enter the workforce. It must begin on campus. Future projects that require veterans to work alongside non-veterans are possible. This work may allow both parties to build camaraderie and common ground with one another. This way, former service members can improve their communication skills with non-military personnel. Civilians would understand how to treat and explain complex ideas to veterans.

Expanded integration programs need to be developed so that civilians can understand veterans with PTSD, injuries from war, or serviceconnected disabilities with much less stigma. Prior service members would develop a strong respect for fellow non-military individuals and decreased stereotypes about civilians.

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	Biography
<image/> <caption></caption>	Stephanie Dizon is a Nursing major with minors in Human Rights and Justice Studies. She wants to become a Public Health nurse, and advocate for marginalized and disadvantaged communities. Her research interests are health disparities and health equity, social and cultural determinants of health, and sociocultural factors as barriers to health. Stephanie's other interests include traveling, outdoor adventures, playing with her dog, and reading good books.
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Reducing Stigma-Driven Health Disparities in People Living with HIV (PLWH): A Literature Review	

Reducing Stigma-Driven Health Disparities in People Living with HIV (PLWH): A Literature Review

Abstract

Introduction: Research has found that HIV-related stigma has numerous negative impacts on the lives of people living with HIV (PLWH). Although there are more resources than ever dedicated to HIV/AIDS efforts, stigma continues to be a major factor challenging the prevention and treatment of HIV today. Understanding the impacts of stigma on health outcomes and quality of life in PLWH is essential to address the global HIV epidemic and reduce health disparities.

Search Strategy: We conducted a secondary meta-analysis of existing research that discussed and evaluated the impacts of HIV-related stigma and discrimination on PLWH. We searched the following databases for peer-reviewed articles: EBSCO Host, Cumulative Index of Nursing and Allied Health Literature (CINAHL), and PubMed. We also obtained reports from Centers for Disease Control (CDC), Food and Drug Administration (FDA), Office of the High Commissioner for Human Rights (OHCHR), World Health Organization (WHO), and the Joint United Nations Programme on HIV/AIDS (UNAIDS).

Results: Our review of the literature revealed that HIV-related stigma is a socially constructed global phenomenon that reflects social and cultural tradition. Most current stigma-reduction interventions are designed to address individual-level stigma (symbolic stigma). While this has contributed to improvements in individual attitudes towards PLWH, interventions at the individual level alone do not address the macro-level attitudes and societal norms that influence individual ideals and behaviors.

Conclusion: Findings in the literature review suggest that because of the pervasiveness of HIV-related stigma globally, addressing stigma is imperative to the HIV response. It also suggests that interventions that

address stigma at the structural level and target multiple domains might have a more profound impact on HIV-related health outcomes.

Keywords: HIV stigma, health disparities, social determinants of health, stigma reduction

Background

In the United States, more than 1.2 million people are living with HIV. Among those at risk, men who have sex with men (MSM), African-Americans, Hispanics, and those who are economically disadvantaged bear a disproportionate burden of HIV (CDC, 2016). Despite the availability of more resources than ever before dedicated to HIV/AIDS efforts, stigma, discrimination, blame, and denial are still several key factors that continue to challenge the prevention and treatment of HIV in 2016. Former head of the World Health Organization's Global Program on AIDS, Jonathan Mann, labeled stigma as the "third epidemic" related to the HIV/AIDS outbreak (Pulerwitz, Michaelis, Weiss, Brown, & Mahendra, 2010). Although it is widely acknowledged that stigma poses a major barrier to effective HIV prevention and treatment, efforts to reduce stigma are still relegated to the bottom of HIV/AIDS program priorities (Mahajan et al., 2008). Current evidence and growing bodies of literature might contribute to shifting HIV intervention priorities as they reveal the impacts of stigma reduction on overall health outcomes in people living with HIV (PLWH).

HIV-related stigma builds upon preexisting prejudices that work to reinforce existing social inequalities that maintain the relationships of power and control (Maluwa, Aggleton, & Parker, 2002). The intersection of discrimination and stigma in these different facets work simultaneously to perpetuate inequality and support a power hierarchy that disadvantages individuals based on gender, minority status, socioeconomic standing, occupation, HIV status, and more (Maluwa, Aggleton, & Parker, 2002; Melton, 2011). Under General Comment No. 14, the United Nations Committee on Economic, Social, and Cultural Rights, states that the right to health is "closely related to and dependent upon the realization of other human rights," including human dignity, education, non-discrimination, and equality (Committee on Economic, Social, and Cultural Rights CESCR,

2000). Although some of these aspects are beyond the scope of this research, they underscore the role that underlying determinants such as discrimination and stigma play on the quality and implementation of health care. The Centers for Disease Control acknowledges that a significant health disparity exists among populations in which HIV is rampant, and successful HIV prevention is dependent upon addressing these disparities and achieving health equity (2015).

Search Strategy

The search strategy and criteria included terms such as "HIV-related stigma," "HIV," "stigma" and "HIV stigma and health." Databases accessed for peer-reviewed articles included EBSCO Host, Cumulative Index of Nursing and Allied Health Literature (CINAHL), and PubMed. Grey literature such as program reports, evaluation reports, and policy documents were obtained from the California Department of Health Care Services, Centers for Disease Control (CDC), Food and Drug Administration (FDA), Office of the High Commissioner for Human Rights (OHCHR), World Health Organization (WHO), Google, and the Joint United Nations Programme on HIV/AIDS (UNAIDS). Inclusion criteria included publications in English and studies of any design from any country that contained stigma and/or discrimination related to HIV. Studies discussing stigma and discrimination outside of the HIV context were excluded.

Drivers of Stigma

HIV-related stigma is a global phenomenon that is highly reflective of social and cultural mores, tradition, and values (Chambers et al., 2015; Gagnon, 2015). It is deeply embedded in social processes and manifests in varying forms on interpersonal, institutional, community, and legislative levels (Pulerwitz et al., 2010). HIV-related stigma is often compounded with other stigmatizing determinants such as homelessness, history of drug use, occupation (e.g., sex work), poverty, race, and sexual orientation (Maluwa, Aggleton, & Parker, 2002; Pulerwitz et al., 2010). It is overtly displayed through interpersonal interactions manifesting as symbolic stigma, or nuanced under laws, policies, and general practices as structural stigma.

Symbolic Stigma

Symbolic stigma within the healthcare context is experienced through interactions with healthcare providers who have negative perceptions of PLWH (Gagnon, 2015). It is evident in the way that PLWH are treated and perceived in healthcare settings. Examples of symbolic stigma are negative stereotypes associated with particular groups (e.g., MSM, drug users, sex workers), mode of transmission (e.g., drug use, unprotected sex), and categorization (e.g., labeling as infectious, dangerous, deviant, guilty) (Gagnon, 2015). Symbolic stigma in healthcare settings can have pervasive repercussions on patients' overall health. Some impacts of HIV-related stigma include incorrect knowledge about HIV transmission, decreased effectiveness of prevention efforts with refusal of HIV testing, reduced adherence to biomedical treatment, refusal to participate in health promotion behaviors (e.g., regular clinic visits, condom use), nondisclosure to partners, and lack of social support (Pulerwitz et al., 2010; Stangl, Lloyd, Brady, Holland, & Baral, 2013; Wagner, McShane, Hart, & Margolese, 2016).

Structural Stigma

Structural stigma includes stigma that is manifested in policies, structures, and discourse that inadvertently result in stigmatizing or discriminatory practices towards PLWH (Gagnon, 2015). This type of policy is exemplified in the U.S. Federal Drug Administration's recommendations for blood donation of MSM. In 1985, the FDA issued a recommendation prohibiting any male who has ever had sex with another man from donating blood as a measure to reduce risk of HIV transmission by blood and blood products. Almost three decades later, studies evaluating this deferral policy indicated that the recommendations for indefinite deferral of MSM were suboptimal. This ultimately led to changes in recommendations for blood donation. Under current guidelines, the deferral policy for MSM is 12 months from the most recent sexual contact with another man (U.S. Department of Health and Human Services, Food and Drug Administration, 2015). However, according to the FDA, "establishments may voluntarily elect more stringent donor deferral criteria than those required or recommended by the FDA" (U.S. Department of Health and Human Services, Food and Drug Administration, 2015, para. 4).

Allowing establishments to individually determine who may or may not be eligible to donate blood despite current recommendations will continue to reinforce institutionalized stigma by form of exclusion. In addition, these policies do not reflect best current scientifically based evidence. Other manifestations of structural stigma are presented in systematic risk management and fear management across health care settings.

Risk Management

Through the language of risk, PLWH are subject to structural stigma. Structural stigma varies from symbolic stigma in that it is often embedded in institutions and is felt beyond individual interactions. An example of this is in risk management and organizational policies. Risk management procedures and organizational policies such as precautionary segregation of PLWH, although initially intended to protect patients, such as from opportunistic infections, could stigmatize them through demarcation and separation from the general public (Chambers et al., 2015; Gagnon, 2015). Additional issues related to risk management within the clinical setting include confidentiality violations such as public display of infection control markings, use of scheduling policies (e.g., scheduling HIV-positive patients last in the day to reduce potential of risk exposure to other clients), and disclosure of patient HIV status among healthcare workers outside of a need to know (Gagnon, 2015). This may pose a problem in multiple ways. Not only can it create an environment that fosters stigmatizing attitudes, it also compromises the protection and confidential handling of patient protected health information required under the Health Insurance Portability and Accountability Act of 1996 (California Department of Health Care Services, 2015).

Fear Management

Although the lack of education or misperceptions regarding the mode of transmission of the HIV virus has been frequently attributed to HIV-related stigma within healthcare settings, research findings indicate that affective dimensions (i.e., emotions) can be a strong driver of HIV-related stigma in the context of healthcare (Chambers et al., 2015). For example, even practitioners knowledgeable of HIV transmission risks report fear of casual contact with HIV-positive patients not because of a

cognitive knowledge gap relating to modes of transmission of the virus, but because of existing prejudices that influence the affective dimensions that overpower rational decision-making (Chambers et al., 2015). This finding further reinforces the social and cultural influences that contribute to HIV-related stigma.

Stigma Reduction

In a systematic review of 48 studies involving stigma-reduction interventions, Stangl et al. (2013) found that the most common types of interventions were targeted at a single socioecological level (n = 41) (Table 1), the most common being at the individual level (n = 27). Less common types of interventions were community level interventions (n = 7), organizational (n = 3), interpersonal (n = 2), and public policy level interventions (n = 2). Only seven studies intervened at multiple socioecological levels (Stangl et al., 2013). Of all studies reviewed, Stangl et al. (2013) found that 79 percent of studies reported statistically significant reductions in stigma.

Table 1

Individual	27	
Community	7	
Organizational	3	
Interpersonal	2	
Public Policy	2	
Multiple targeted levels	7	

Socio-ecological levels targeted in 48 studies (Stangl et al., 2013)

Overall, the reviewed studies reveal the overwhelming complexity and multidimensional nature of HIV-related stigma. The findings indicate the significance of addressing both symbolic and structural stigma, and thus, suggest the need for interventions to reduce both interpersonal and structural forms of HIV-related stigma.

Results

Findings suggest that HIV-related stigma is a socially constructed phenomenon that is representative of social and cultural traditions and

norms. It is often compounded with other stigmatized conditions such as racial and ethnic minority status, socioeconomic standing, and sexual minority status (Maluwa, Aggleton, & Parker, 2002; Pulerwitz et al., 2010; Chambers et al., 2015; Gagnon, 2015). This reveals that determinants such as racial and ethnic background, income, and class play a role in stigma that many PLWH encounter. Problematic stereotypes about people of color, the poor, LGBTQ, drug users, sex workers, etc. contribute to negative perceptions about PLWH. Therefore, such determinants must be taken into account when examining appropriate responses and interventions for addressing HIV, particularly in those who fall into these categories. Because HIV-related stigma permeates social structures and reflects dominant culture ideology, it remains salient today and continues to present a challenge in the HIV/AIDS response.

Current research indicates that there has been considerable progress in reducing stigma and negative attitudes toward PLWH as a result of stigma-reduction interventions (Stangl et al., 2013; Clair, Daniel, & Lamont, 2016). A majority of research surrounding HIV-related stigma examines the impacts of stigma on an interpersonal level, with a focus on individual attitudes and behaviors towards PLWH. Moreover, most current stigma-reduction interventions have targeted individual-level stigma, which has contributed to improved individual attitudes towards PLWH. However, interventions that address structural level stigma that target macro-level attitudes such as those toward minority groups, the poor, and those who participate in perceived socially deviant behaviors, cultural norms, and tradition remain relatively understudied.

Analysis

In order to gain a greater understanding of the impacts of stigma on PLWH, it may be helpful to think about HIV-related stigma as a systemic problem. Stigma can be real, perceived, overtly expressed, or subtly conveyed. Regardless of the mode of delivery, it affects all who are faced with stigmatizing experiences.

In 1943, Abraham Maslow described a hierarchy of human needs that falls into five stages: physiological needs (e.g. air, food, drink, shelter, warmth, etc.), safety and security needs (e.g., protection from elements, security, order, law, stability, etc.), love and belonging needs

(e.g., friendship, intimacy. affection and love). selfachievement, mastery, esteem needs (e.g., independence, status, dominance, prestige, self-respect, respect from others), and selfactualization needs (e.g., realizing personal potential, self-fulfillment, seeking personal growth and peak experiences. He argued that the basic physiological needs must first be satisfied before any higher level needs can be met, followed respectively by safety and security, love and belonging, self-esteem, and self-actualization. Thinking about HIV stigma in relation to Maslow's hierarchy of needs, one can argue that Western societal values relegate stigma into the realm of higher level needs (i.e., self-esteem). Using Maslow's hierarchy as a framework might explain why HIV-related stigma remains at the bottom of HIV/AIDS priorities. While it can be argued that stigma appropriately falls into the category of self-esteem needs, it can also be said that stigma impacts certain aspects of physiological and safety needs through allocation of resources and lack of access to essential components in these categories. Our findings indicate that HIV-related stigma can contribute to or detract from fundamental human physiological and safety and security needs; thus, we argue that stigma remains a pertinent barrier to addressing the HIV epidemic and remains a pressing aspect in the HIV response.

Discussion

While there have been significant improvements in reducing individual stigmatizing attitudes and behaviors toward PLWH, existing stigma-reduction interventions rarely address structural stigmas. Emerging themes in the literature emphasize the need for collective efforts and a multidimensional approach that involves social and cultural paradigm shifts (see Table 2). Clair et. al (2016) suggest that social actors play a significant role in shaping cultural constructions surrounding stigmatized groups, and these constructions must be changed using the influence of these social actors. Others suggest the importance of increasing awareness through education, support, and legislation (Thapa, Hannes, Cargo, Buve, & Mathei, 2015; Clair et. al, 2016).

Table 2

Comparison of proposed stigma-reduction intervention strategies

Clair, Daniel & Lamont, 2016	Thapa et al., 2015	Chambers et al., 2015
Change cultural constructions surrounding stigmatized groups by using social actors (i.e., public health and medical experts, legal experts, social science and policy experts, media and journalists, social movement activists, firms and workplaces) to remove blame and create equivalencies in PLWH and the general public.	Create awareness using HIV-specific information- based written or verbal communication and education.	A multidimensional approach involving healthcare settings, and also address discrimination within institutional culture as well as factors that foster HIV-related stigma at the individual, environmental, and societal levels.
	Provide psychosocial, clinical, socio-economic, and family and community support to people living with or at risk for HIV/AIDS.	

Implement interventions that incorporate HIVspecific legislation that protects and respects the human rights of people living with HIV, and develop normative behavior by increasing community organizing and actions.

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Conclusions

Findings in this research suggest that 1) stigma must be a priority in the HIV response, and 2) both individual-level and structural-level stigma must be addressed in order to decrease overall HIV-related stigma. While interventions addressing symbolic stigma have shown considerable progress, there remain significant gaps and challenges in understanding and encompassing stigma on a larger scale. Due to the complexity and multifaceted nature of HIV-related stigma, it is imperative to also address the structural factors that foster public stigmatizing attitudes and behaviors such as negative perceptions of minority groups including people of color, LGBTQ, and people of lower socioeconomic status. Further, it is crucial to examine the impacts of factors and conditions that compound these stigmas. Findings suggest that incorporating both symbolic and structural stigma and understanding the compounding effects of other stigmas (i.e., occupation, poverty, homelessness, race, sexual orientation, etc.) and structural determinants could have a more drastic impact by addressing the root of HIV-related stigma. To fully understand the scope of the problem, it may be helpful to gain a better understanding of stigma from the perspectives and experiences of PLWH. Future research evaluating the impacts of stigma that juxtapose the perceptions of stigma from PLWH who belong to minority groups (i.e., racial/ethnic minorities, LGBTQ) and PLWH from majority groups (i.e., non-racial minorities, heterosexual) could relay invaluable information that may guide potential stigma-reduction interventions and ultimately contribute to addressing stigma-driven health disparities in PLWH.

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Diego Gomez

Major: Psychology

Mentor: Dr. Richard Petty (Ohio State University)

The Effects of Anger and Happiness on Opposite Valence Racial Stereotypes

Biography

Diego Gomez is an immigrant from Jalisco, Mexico. He moved to the United States when he was five *years old. In having to adapt to a* different culture, and living the majority of his life in poverty, Diego became academically inclined to improve the life of his family. Through his motivation and persistence, he will become the first in his family to obtain a Bachelor's degree when he graduates this May. His pursuit of a higher education will not stop there, however, as he was recently accepted into a one-year research internship for Dr. Greg Walton's lab at Stanford University. In this lab, Diego conducts research on *identifying effective ways to* communicate with students placed on the academic probation/warning process to improve their academic outcomes. Diego will be applying to a Ph.D Program in Social Psychology this Fall, where he plans on getting the necessary skills to achieve his life-long academic goal of becoming a professor and researcher at a University.

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Abstract

This research examines angry and happy (versus neutral) emotions and how they affect ethnic stereotyping. Research has found that both anger and happiness increase a person's reliance on stereotype information versus neutral emotion when making social judgments. Research has also found that ethnic stereotypes are not exclusively negative, as some stereotypes make positive generalizations of certain groups. However, research on ethnic stereotypes has exclusively been presented in a negative and not a positive context. Furthermore, past studies have only focused on negatively stereotyped racial groups (e.g., Hispanics) and not positively stereotyped racial groups (e.g., Asians). This research concentrates on both positively and negatively stereotyped groups, in both a negative and a positive context, with positive and negative emotions. This experiment explores Hispanic stereotypes in both a negative and positive context for participants who were induced to be either angry, happy, or neutral. Furthermore, we included an Asian ethnic condition, which is stereotypeinconsistent from the aggressive trait associated with Hispanics. Implications about the effects and limitations that anger and happiness have on increasing stereotyping versus neutrality are also discussed.

Keywords: emotions, stereotypes, judgments, anger, happiness.

Literature Review

Over the course of the past three decades, there has been an extensive amount of research on the effects moods have on social judgments and stereotyping. Initially, research indicated that judgments followed the valence (i.e., positive or negative connotation) of the mood (Schwarz & Clore, 1983). These findings brought forth the theoretical approach of the mood congruency effect, which assumes that individuals make judgments biased in the valence of the prevalent mood (e.g., Bower, 1991). This valence-based approach divided mood into two broad categories: negative and positive (Lerner, Li, Valdesolo, & Kassam, 2015). Therefore, in the instance of a positive mood, the mood congruency effect predicts that the judgment that proceeds the positive mood will also

be positive (Loewenstein & Lerner, 2003). However, later research on emotions and decision-making found that this theoretical approach has limitations.

The major limitation of the mood congruency effect is that it predicts all emotions will influence the judgment in accordance to the valence of that emotion. In this theory, both anger and sadness would be expected to elicit negative judgments because they both have a negative valence. However, it is important to understand that there is a clear distinction between moods and emotions and that the effects they have on social judgments and stereotyping differ.

In social, personality, and cognitive psychology, moods and emotions have been researched extensively, acknowledging that their basis and implications differ. While mood refers to more general effects of how the individual feels that persist in duration and its antecedents are not clear to the individual experiencing the mood, emotions refer to more focused affective states that arise from actual situations in the world and are shortlived as well as biologically mediated reactions to perceived survival events (Bodenhausen, Sheppard, & Kramer, 1994; Forgas, 2013; Lerner, Li, Valdesolo, & Kassam, 2015). The contrast between these two forms of effects is essential to understanding why emotions of the same valence have been found in research to have different effects on a person's cognition and motivation.

Research focused on comparing the emotion of both anger and negative mood has found that they have different effects on individuals (DeSteno, Dasgupta, Bartlett, & Cajdric, 2004). In the comparison between anger (emotion) and negative mood (valence), anger has been found to increase stereotyping and prejudice toward outgroups while negative mood has not shown this effect. Negative mood has also been found to enhance motivation and memory performance, lower erroneous judgment reliance, and improve interpersonal strategies (Forgas, 2013). The difference found in research between anger and negative mood furthers the implication that these forms of effect differ, despite both having a negative valence.

While negative mood may improve systematic processing, research on positive mood has found different effects. Specifically, positive mood has been found to increase reliance on early information (i.e., primacy

effect) in evaluative judgments (Forgas, 2011b). Also, positive mood increases the utilization of erroneous memories in eyewitness recollection (i.e., false alarms; Forgas, Vargas, & Laham, 2005). Both primacy effects and false alarms can lead to negative judgments when the individual is making a decision about a situation or target. These findings not only contradict the mood congruency effect—in that they indicate opposite effects of what the valence-based approach predicts—but they also contradict the notion that all emotions with a negative valence (in this case, anger) will lead to negative judgments about a target.

Although once predicted to have the same effects on decisions, emotions with a negative valence such as anger, anxiety, and sadness have been shown to have different effects on social judgments and other forms of cognitive processing (Lerner, Li, Valdesolo, & Kassam, 2015). For example, anger and sadness have been found to differ in their effects on perceivers' heuristic cue reliance when making social judgments (e.g., for anger and sadness: Bodenhausen, 1993; Bodenhausen, Sheppard, & Kramer, 1994b; for sadness: Krauth-Gruber & Ric, 2000). Specifically, anger has been found to increase reliance on stereotypes and sadness has been found to decrease reliance on stereotypes. In other words, with stereotypes being heuristics, these findings imply that anger increases heuristic processing in social decisions, while sadness decreases this effect. Anxiety, also having a negative valence, has been found to have inconsistent effects on stereotype evaluations. Past research has theorized that anxiety increases stereotype use because it burdens the individual with a cognitive load (Darke, 1988), making the reliance of stereotyping a matter of saving cognitive-processing resources (Macrae, Milne, & Bodenhausen, 1994; Wilder, 1993). However, a recent study indicated that although anxiety may cause a cognitive burden, people may direct their cognitive resources to information-processing in an effort to produce an accurate evaluation rather than relying on stereotypes to form their judgments (Curtis, 2013). Therefore, anger, sadness, and anxiety have different effects on stereotyping, even though they have negative valence. The variance in emotions with a negative valence, such as the ones mentioned, indicate that specific emotions affect cognitive, heuristic and systematic processing in different ways.

Of particular interest in the effects emotions have on decisionmaking is that happiness (positive valence) has been found to increase the reliance on stereotypes in evaluations (Bodenhausen, Kramer, & Süsser, 1994; Krauth-Gruber & Ric, 2000; Curtis, 2013; Park & Banaji, 2000). While anger, sadness, or anxiety have contrasting effects on stereotype reliance, anger and happiness have similar effects on cognition, despite having the opposite valence (i.e., happiness has a positive valence and anger has a negative valence). Research on anger and happiness has shown that these discrete emotions are "high certainty" emotions (Tiedens & Linton, 2001) that increase reliance on heuristic cues for judgment and decision making. Similarly, research has shown that anger and happiness could make individuals feel more certain in their appraisal of a situation (Ellsworth & Smith, 1988), which leads to individuals having more confidence in their thoughts (also called cognitive validation; Petty, Briñol, Tormala, & Wegener, 2007).

Despite their similarities, anger and happiness have also been shown to have key differences in the way they affect cognitive processes. For instance, Bodenhausen, Sheppard, & Kramer, (1994) attributed the increased use of heuristic information by angry individuals to the more complicated physiological responses (e.g., increased heart rate, epinephrine secretion and blood pressure) it produces. They also attributed the decreased use of systematic processing in anger to increased impulsive behavior that is associated with the perception of an immediate threat, which may lead to difficulty concentrating in certain ambiguous situations. This limitation in focus, therefore, leads people to rely on heuristic processing when making decisions and judgments (Lerner, Li, Valdesolo, & Kassam, 2015).

Happiness, on the other hand, decreases a person's information and systematic processing capabilities when making judgments because it affects people's motivation to think carefully about individuating information (Bodenhausen, Kramer, & Süsser, 1994; Curtis, 2013). Instead of thinking about all the factors that may be present at any given point in time, happy people rely on categorical information (e.g., stereotypes) when evaluating specific targets and situations. Happiness also leads to a liking of one's own thoughts (affective validation), potentially increasing the reliance on mental contents that validate their

thoughts at the time of feeling happy (Petty et al., 2007). These root causes and effects differ from that of anger, as anger does increase a person's confidence in their own thinking (cognitive validation), but does not increase one's liking of their own thoughts (affective validation); happiness, on the other hand, increases both (Petty, & Briñol, 2015). Thus far, in the literature, happiness and anger have been studied under identical conditions. For example, Bodenhausen, Kramer, & Süsser, (1994) conducted four experiments that attempted to decipher the most prominent influence in happiness' effect on increasing stereotype judgments. Emotions were induced by telling participants to recall happy experiences they previously had. They were then told to read a study on "legal socialization," which was based on a disciplinary case against an individual suspected of an assault or cheating crime (i.e., cheating on a standardized exam).

In the neutral condition of the assault case, the suspect was named "John Garner"; in the stereotype condition, the suspect was named "Juan Garcia." In the cheating case, the suspect was described as "a well-known athlete." In the assault case, the suspect was given the name "Juan Garcia," a name of Hispanic origin, to address the stereotype associated with Hispanic males as being aggressive and violent. Furthermore, both the assault and cheating cases were ambiguous, with half of the information implying guilt and the other half implying innocence. The ambiguity of the guilty verdict excluded the confounding variable of case information (i.e., the assault case), influencing participants' decisions on the suspect's guilty verdict.

Happy participants not motivated to process systematically judged the Hispanic-named suspect (stereotyped condition) significantly guiltier than the control-condition name. In all of the experiments, when the case information was ambiguous and there were no moderators present (in one experiment, the moderator factor "accountability," motivated happy participants to avoid stereotyping), happy participants stereotyped more so than neutral participants. These effects were replicated with gender (Curtis, 2013, experiment 3), skinheads, and young priests (Krauth-Gruber & Ric, 2000, ambiguous condition).

The same study design as Bodenhausen, Kramer, & Süsser (1994) was utilized for the emotions of anger and sadness (Bodenhausen,

Sheppard, & Kramer, 1994), with researchers conducting three experiments, the first being identical to that of Bodenhausen, Kramer, et al. (1994). Like happiness, anger significantly increased stereotyped judgments when compared to neutral and even sad participants. Specifically, Bodenhausen, Sheppard, et al. (1994) found that anger increased stereotyping and sadness decreased stereotyping when participants made judgments about groups that are stereotyped to commit an assault crime (i.e., Hispanics) or a cheating crime (i.e., athletes). As previously mentioned, even though anger and sadness have a negative valence, the findings of this study indicate that they have opposite effects in the way they influence decision-making under the ambiguous situation of a disciplinary hearing (Bodenhausen, 1990, Experiment 2). Also, findings indicate that happy and angry individuals—when making social judgments and processing social categories-rely on heuristic cues more so than sad individuals. Both studies give theoretical validity to the commonalities found in research between anger and happiness.

Current Study

Despite having similar findings under identical conditions, anger and happiness have not been analyzed in different contexts. In the case of Bodenhausen, Sheppard, & Kramer (1994) and Bodenhausen, Kramer, & Süsser (1994), the stereotypes were of negatively perceived ethnic group members in a negative context (i.e., a Hispanic individual committing an aggressive crime). However, there has yet to be a study in which a positively stereotyped ethnic group member is judged in a positive context (e.g., an Asian-American receiving an academic award based on the stereotyped trait of higher intelligence).

Past research has used positive ethnic stereotypes such as those associated with Asian-Americans (e.g., Forgas & Moylan, 1991; Esses, & Zanna, 1995), but were only based on general perceptions of the group as opposed to judgments of them in a stereotype-consistent yet ambiguous case description, similar to the cases of Bodenhausen and colleagues (1994). Krauth-Gruber & Ric (2000) did use a positively stereotyped group (young priests), but they were not described in a positive context (stereotype-consistent) that would have matched the positive valence of the stereotype; they were described in the context of committing a violent

act (stereotype-inconsistent). In another study, Bless, Schwarz, & Wieland (1996) used a positively stereotyped group (Greenpeace representative) in a positive and stereotype-consistent context (e.g., Greenpeace representatives as being environmentally conscious), but the information about the group was not ambiguous. Given that ambiguity in a stereotype-consistent setting is what deciphers the use of stereotypes, it is important, therefore, to test if this method is also applicable to positively stereotyped groups, such as Asian-Americans (Aronson, Lustina, Good, Keough, Steele, & Brown, 1999; Cheryan & Bodenhausen, 2000).

Methods

Participants

We randomly assigned a total of 486 participants in the experiment through Amazon's Mechanical Turk. All participants received a financial incentive for their participation.

Design

Participants were randomly assigned to a condition of 2 (stereotype case: Hispanic-stereotyped positive act vs. Hispanic-stereotyped negative act) \times 3 (ethnicity: Asian vs. Hispanic vs. Control [White]) \times 3 (emotion: happy vs. angry vs. neutral) in this between-participants factorial design. For the Hispanic stereotype positive act, we created a vignette that described an individual saving a life by aggressive means (i.e., fighting the perpetrator). In the negative version, we described an assault crime. We also altered the individual's ethnicity in the vignette by changing their name for each of the cases. The rest of the case information remained identical in the different conditions.

Materials

We prompted participants to complete two tasks that we described as unrelated. The first experiment described an emotion and memory task and the second described a disciplinary case (negative outcome) or an award receiving case (positive outcome).

In the first task, we induced emotion states by imitating the procedures described in Bodenhausen, Sheppard, et al., (1994),

Bodenhausen, Kramer, et al., (1994), and Strack, Schwarz, & Gschneidinger (1985). For the angry group, participants were prompted to write about a life event that they interpreted as arousing anger. Specifically, we asked participants to recall an event that caused them to be angry and write about it in detail. Participants were also prompted to be specific and vivid in their recall descriptions and to give details about how they felt at the time of the experience. For participants in the happy condition, we used the same procedures, but rather than asking participants to recall an angry event, we asked them to recall a positive experience that made them happy. In the neutral group we asked participants to recall an everyday normal routine. The recall writing tasks were controlled by time and character count constraints in Qualtrics. This was to ensure that participants engaged in recalling a specific event that induced the appropriate emotion.

In the second task, we asked participants to read a vignette with either a negative or positive outcome. The vignette with a negative outcome described a situation in which a student was a suspect in a disciplinary case that involved aggressiveness while the positive version described a student as a potential recipient of an award for a heroic act that also involved aggressiveness. The act of aggressiveness remained intact for both versions of the vignette to represent the male Hispanic stereotype. In both cases, the details about the story were ambiguous, with an equal amount of evidence in favor of and against the student.

The purpose of the two vignettes was to obtain mean guilt ratings among happy, neutral, or angry participants when making judgments about either a Hispanic, Asian or White student. The stories were either ethnically stereotype-consistent (in the case of the Hispanic student) or stereotype-inconsistent (in the case of the Asian and White student). In each of the cases, the name of the student varied in ethnic connotation to represent each of the three ethnic groups. All other information about the student remained identical between the conditions.

Vignettes

As previously mentioned, the vignette described a stereotypeconsistent case that tapped into the ethnic stereotype associated with Hispanic males as being aggressive and violent (Bodenhausen, 1990). One

version of the vignette had a negative outcome while the other version had a positive outcome. The negative case described an assault crime, in which the evaluated student was suspected of committing a crime against another student. The positive case described a scenario in which the evaluated student aggressively attacked a thief who was attempting to commit a robbery. The result of the student attacking the thief ultimately saved a peer's life and led to an award recommendation for the heroic act. In all cases, the information was ambiguous, as in, a portion of the information indicated the student was innocent (disciplinary case) or that the student deserved an award (receiving credit case), while the other portion of the information indicated that the student was guilty or that they should not receive the award. The purpose of having an ambiguous case is to have participants focus on the target's categorical information (i.e., racial ethnicity), so that when making judgments, participants would not rely on case information. This procedure has been found to be effective in isolating categorical information from case information (Krauth-Gruber & Ric, 2000).

The student in question for the Hispanic ethnic condition was "Jose Garcia," emulating the conditions in Bodenhausen, Kramer, et al. (1994). The Asian and White ethnic conditions had names with ethnic connotations respective for each group. Specifically, the student in the Asian ethnic condition was named "Jing Chung" and the student in the White ethnic condition was named "John Garner." The Asian ethnic condition was stereotype-inconsistent; the Hispanic ethnic condition was stereotype-inconsistent; and the White ethnic condition was neither stereotype-consistent nor stereotype-inconsistent (control condition). We randomly assigned each of the different ethnic names to participants.

The main dependent measure was the mean guilt ratings of participants for each of the ethnic conditions. The other dependent measure was the mean rating of a general stereotype assessment that measured beliefs about Hispanics and Asians. This assessment contained items such as, "Of 100 random people of Hispanic descent living in the U.S., how many are convicted of committing a violent crime in a year?" These items were used interchangeably (i.e., asking the same question about committing a violent crime) for Asians and Whites in order to

determine significant differences (if any) in their beliefs about each of the ethnic groups.

Conclusion

This pilot study will specifically gather more data to accurately complete this research. The sample of surveys will be double in size. In total, we are expecting to have over 900 participants, all of which will be from Amazon's MTurk. We will collect this data over a three-month period in the summer of 2017.

In the process of gathering more data, we intend to look at how participants' gender, ethnicity, political party, age, and other demographic information will affect their responses to each of the conditions. As an example, we are attempting to answer the question: "Will a specific sample of participants from the same ethnic background, on average, judge the Hispanic-named student as more likely to have committed the crime?" Questions of this nature apply to all other demographic information, as we are attempting to identify specific judgmental patterns from participants.

In addition to identifying judgmental patterns based on demographics, we intend to compare and contrast our results in the negative Hispanic stereotype-consistent case to those of Bodenhausen, Kramer, & Süsser (1994) because the study designs are essentially identical. In comparing results, we will be able to determine if there have been any changes in opinion toward Hispanic males in the past twenty years. This is of particular interest, given the current political climate and how it may have affected public beliefs about negatively stereotyped groups. With such a time difference, we are interested in identifying whether public opinion has remained stable (this would mean that negative stereotypes still persist), shifted in a more negative (i.e., has stereotyping toward Hispanic individuals increased) or positive (i.e., has stereotyping toward Hispanic individuals decreased) way.

Future Research

Given we have not collected our data, we are not in a position to recommend future areas of study for researchers in this domain.

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Jaspinder Kaur

Major: Nursing

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Male Nurses: A Visible Minority

Biography

Jaspinder Kaur is a 2nd year nursing student at San José State University (SJSU). Jaspinder is interested in pursuing a graduate degree in nursing in hopes of becoming a nurse researcher. Jaspinder's current project focuses on men in the nursing profession. Her goal is to explore commonly faced challenges by male nurses/nursing students and understand how these perceptions and stereotypes affect their ability to provide care.

In addition to being a firstgeneration college student, she is also the first woman in her family to go to college. Pursuing higher education is very important to Jaspinder because it would help her develop her potential, lead an independent life, and influence other female members of her family to attain a higher education. She hopes to break the sociological barrier of education in her family and community through her educational experiences.

Male Nurses: A Visible Minority

Abstract

Because nursing is associated with feminine characteristics, it is mainly considered a woman's profession (Meadus, 2000; Roth & Coleman, 2008). Despite the increasing number of men choosing nursing as a profession, they often face discrimination in this predominantly female profession (Roth & Coleman, 2008). When men choose a female-dominated profession like nursing, they are questioned regarding their sexual orientation and are considered inappropriate for bed-side nursing (O'Connor, 2015; Meadus, 2000). Patients' perceptions of male nurses as sexual aggressors or gay affects their ability to do their job (Evans, 2002). The goal of this literature review is to explore challenges commonly faced by male nurses and understand how these perceptions and stereotypes affect their ability to provide care.

Introduction

When people hear the word "nurse," they immediately think of a woman in scrubs, so it's no surprise that nursing is a female-dominated profession (Rajacich et al., 2013). For example, as of 2011, 91% of nurses were women and only 9% were men ("Men in nursing," 2013). Despite nursing being a normative career for women, more men are now choosing it as a career option ("Men in nursing," 2013). For example, the rate of men in nursing has increased from 2.7% in the 1970s to 9.6% in 2011 ("Men in nursing," 2013). Despite the efforts to increase the number of men in nursing, they are still a minority in this profession ("Men in nursing," 2013).

Even though historically men provided significant contributions to nursing, they have received little to no recognition (Rajacich, Kane, Williston, & Cameron, 2013). For example, in the U.S, men served as nurses during the Civil War, and they were significant in reducing mortality rates among the troops during the wars (Rajacich, et al., 2013). Even Mahatma Gandhi was a nurse during his time in Africa (Rajacich et al., 2013). Lack of recognition of male nurses in history further encourages society to associate nursing with women (Rajacich et al., 2013).

Although both genders have the ability to care and nurture, these characteristics are mostly considered appropriate for women; therefore,

men often face issues with gender identity and stereotypes for choosing a feminine career (Roth & Coleman, 2008; Rajacich et. al., 2013). Many people think that men choose nursing because they are gay, and they face discrimination in clinical settings because of this common stereotype (Evans, 2002; Roth & Coleman, 2008). Even patients have a difficult time considering men as appropriate for a job that requires touching, caring, gentleness, and nurturing (Meadus, 2000; Roth & Coleman, 2008). As men challenge gender-defined roles and choose a nontraditional career like nursing, they often face discrimination (Meadus, 2000; Roth & Coleman, 2008). This is interesting because men are criticized for choosing a female-dominated profession, but their female counterparts are more likely to be praised and gain recognition when they choose a male-dominated profession (Meadus, 2000; Roth & Coleman, 2008).

Regardless of society's attitudes and perceptions of male nurses, research shows that men choose nursing for the same reasons women do, which is to care, nurture, and advocate for their patients (Meadus, 2000). Therefore, the goal of this literature review is to explore the common challenges male nurses face and understand how gender stereotypes affect their ability to provide care and build relationships with their patients.

Methods

I searched multiple databases, including PubMed and Medline, and key words included male nurses, stereotypes in nursing, male nursing statistics, male nurse recruitment, male nursing students, and clinical experience. Studies that were published between 2002 and 2017 were considered for my literature review. I reviewed over 25 articles, but only 10 articles were considered for my literature review. The following is the summary of each study.

Schmidt (2016) explored male student nurses' professional values in clinical and classroom settings and how well they adjusted to the hospital setting. Open-ended questions regarding participants' clinical experiences were used to facilitate the interviews. They conducted a qualitative and phenomenological study. The data was analyzed, categorized, coded, and lastly, common themes were identified (Schmidt, 2016).

Nine male nursing students in their third or fourth year of nursing school participated in this study. Four students were third-year students and five were fourth-year students. Twenty-two percent of the participants were over the age of 30 and 78% identified themselves as Caucasian. Because being certified as a nursing assistant was an admission requirement for this particular school, most of the participants had experience working in a healthcare setting as a nursing assistant (Schmidt, 2016).

Evans (2002) conducted his study on 8 male registered nurses (RNs) from Nova Scotia, Canada; their ages ranged from 20 to 50 years. The participants had between 7 and 32 years of experience working as nurses in multiple areas of nursing, including mental health, medical-surgical, leadership roles, and community health (Evans, 2002). Two rounds of interviews were conducted with these participants.

Rajacich et al. (2013) used a descriptive qualitative design to analyze the responses of 16 male nurses in this study. The participants were between the ages of 21 and 48 years, and their experience in nursing ranged from 2 months to 21 years.

The main theme of these articles revolved around the idea of care and how both genders demonstrated it (Schmidt, 2016; Evans, 2002). The participants stated that they developed core professional values, such as caring, before even starting nursing school (Schmidt, 2016). Because their nursing values were influenced by various life experiences, it was easy for them to understand the concept of care (Schmidt, 2016). They showed their care through patient advocacy, safety, effective communication, and teamwork (Schmidt, 2016. Even though touch is a common tactic to provide comfort and reduce anxiety, male nurses reported being hesitant with this concept (Schmidt, 2016; Evans, 2002).

Female nurses often showed care by touching patients, whereas men reported using humor to bond with their patients because it helped reduce their own and patients' anxiety (Schmidt, 2016; Evans, 2002). Male nurses have to carefully assess the patient situation before they even decide to touch (Schmidt, 2016; Evans, 2002). Even when male nurses are providing care for male patients, they reported being very careful with their touch. For

example, teen patients might misinterpret the male nurses' touch and perceive them as being gay (Evans, 2002). One participant working in a mother-baby unit stated that he was accused of inappropriately touching a newborn baby boy while he was changing his diaper.

The study conducted by Rajacich et al. (2013) explored male nurses' viewpoints of being a visible minority in the nursing profession. Participants stated that being a minority had both positive and negative aspects. Some men stated that being a minority motivated them to do their best because they represented other male nurses; they also had the opportunity to promote nursing to young men in schools. On the other hand, a few men reported that being a visible minority was harmful as it was associated with discrimination and prejudice (Rajacich et. al., 2013). For example, in Schmidt's (2016) study, male nursing students and nurses reported not getting enough recognition for their patient care; instead, they were often called to get help with lifting a patient and technology-related problems (Schmidt, 2016. Furthermore, a majority of them hated being identified as male nurses because it isolated them from their female counterparts, who are simply referred to as nurses (Rajacich et. al., 2013). The term "male nurse" further signifies that they are indeed a minority in this profession (Rajacich et. al., 2013).

Discussion

The main theme of these articles revolved around the idea of care and how both genders demonstrated it. Providing physical comfort to patients, regardless of their age and gender, comes naturally to female nurses (Evans, 2002; Rajacich et al., 2013). Men nurses stated being reluctant to provide physical comfort to patients as they were afraid that their touch may be viewed as inappropriate (Schmidt, 2016; Rajacich et al., 2013). For example, the participants in Meadus and Twomey's study (2011) reported receiving little to no information on the use of touch during nursing school, so this made their transition into the clinical setting extremely difficult. For this reason, men have to put in extra efforts to build comfortable relationships with patients and delegate tasks that involved intimate touch of patients to avoid professional complications (Rajacich et al., 2013).

Another common theme that emerged was that men hated being referred to as male nurses (Schmidt, 2016; Rajacich et. al., 2013). The gendered-term "male nurses" made them feel that they do not belong in nursing (Schmidt, 2016; Rajacich et. al., 2013). This term further reinforced the norm that men are indeed a visible minority in this profession. Instead of being labeled as male nurses, the participants hoped to be simply known as nurses.

The articles that I reviewed explored common barriers that male nurses face in the nursing setting. However, lack of diversity was a major weakness of these studies. For example, Schmidt's study included only college students from one university and they were mostly Caucasian. Evans' (2002) study only explored eight male registered nurses' experiences. None of these studies explored the female nurses' viewpoints of men nurses in clinical settings. These studies cannot be generalized because the results were not representative of other men nurses across the country.

This literature review shows the continued need for promoting equal acceptance of male nurses in the clinical setting. The feminine image of a nurse in society is a significant barrier preventing men from choosing nursing as a profession (Meadus, 2000; Roth & Coleman, 2008). Therefore, I would like to expand this topic by exploring male nursing students' experiences in nursing school and clinical settings. The results can be used to promote awareness of issues male nurses commonly face.

Conclusion

Nursing is still a female-dominated profession, and this creates problems for men who are interested in this profession. Research suggests that men choose nursing as a career to provide care and help others, but they are questioned regarding their sexual orientation, and are considered inappropriate for bed-side nursing (O'Connor, 2015). Care is a core nursing principle, and nurses of both genders show care towards their patients differently. Providing comfort by touching comes naturally to female nurses. However, because men's touch is sexualized in general, male nurses are more reluctant to touch their patients. Stereotypes that men are inappropriate for bed-side nursing impacts their ability to perform their duties to their best.

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Rashmeen Kaur

Major: Political Science

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U.S. Participation in Global Climate Change Resolutions: Analysis of the Kyoto Protocol

Biography

Growing up as a first-generation student fueled Rashmeen's passion to serve and advocate for students in racially disparate communities. *She aspires to a Master's in Public Policy (MPP), specializing in education policy. She is an alumni* at the Public Policy and International Affairs Program at Princeton University. She currently works with a non-profit organization providing tutoring to first generation students in math and has worked with other similar non-profit organizations that have provided her with a hands-on understanding of the inequalities in education that children from underprivileged communities experience. As a legislative intern in Washington DC, Rashmeen worked closely with staff members specializing in policy issues, giving *her a birds-eye view of how policy* works at a higher level. While there is a history behind her passion for public service and education policy, other policy issues are just as intriguing to her. Following an MPP, she hopes to earn a PhD in public policy specializing in racial disparities surrounding policy and education.

U.S. Participation in Global Climate Change Resolutions: Analysis of the Kyoto Protocol

Abstract

The ratification of treaties, particularly the Kyoto Protocol (KP), is complicated due to domestic forces such as democracies, presidency, and public opinion. The United States is the second largest emitter of carbon emission and has yet to sign on to the stringent mitigation efforts of the KP. Climate change is an issue considered unrelated to national security; however, it is one of the most dangerous national and global threats. Ratification and implementation are domestic factors that increase the stability and credibility of international agreements. The process may be dreadfully slow, but the commitment level of democratic states tends to be significantly high. The lack of legislative support during President Clinton's administration and President Bush's links with the energy industry are additional examples of factors constraining support for the agreement. Lastly, public opposition towards anthropogenic climate change stems from disbelief in global warming. Climate change is one of the most pressing global issues present today requiring critical repair. Implementing the stringent goals of the KP is an excellent way towards mitigation and key elements of international governance. The U.S. can maintain its role as a superpower by taking the lead on this issue and avoiding domestic forces constraining the adoption of this agreement. If the U.S. ratifies the KP, other countries are more likely to follow this nation's footsteps. Although the ratification process is complex, it is important that our current legislative and executive powers push the policy forward by placing it higher on the political agenda through the use of news and online outlets.

Introduction

Fifteen to twenty countries are responsible for roughly 75 percent of global emissions, but no one country accounts for more than about 26 percent. Efforts to cut emissions—*mitigation*—must therefore be global. Without international cooperation and coordination, some states may free ride on others' efforts, or even

exploit uneven emissions controls to gain competitive advantage. (Council on Foreign Relations, 2013, p. 5)

For all immediate challenges that we gather to address this week—terrorism, instability, inequality, disease—there's one issue that will define the contours of this century more dramatically than any other, and that is the urgent and growing threat of a changing climate. (Obama at the U.N. Climate Change Summit, 2014, p. 1)

Addressing the horrifying state of the current environment requires international agreement and cooperation. With the absence of an international government, there are organizations and agreements in place to help resolve issues such as climate change. These include the United Nations Environment Program (UNEP), Kyoto Protocol (KP), and United Nations Framework Convention on Climate Change (UNFCCC). The UNFCCC today has a near-universal membership, and 195 countries have ratified the Kyoto Protocol agreement (United Nations Framework Convention on Climate Change, 2014). The international treaty remains without the participation of one of the world's most dominant nations, the United States.

This article starts with the history of the KP, moves to examining domestic factions including democracy, presidency, and public opinion, and ends with the benefits and importance of U.S. cooperation in this agreement. Without global agreement and participation from the U.S., the anticipation of success in combating climate change will end in disappointment. The current state of the environment is appalling and requires as many countries as possible to sign onto the KP— especially the major contributors to pollution. The U.S. should not allow "free rider" issues to interfere with the manifestation of the KP. Furthermore, without the support of domestic institutions, ratification is unstable. Ratification of treaties through federal states-states with powerful subunits of domestic institutions-is a significantly complicated process. Institutional complications that surround the politics of ratification are fragile due to domestic influences such as a president's level of environmentalism, legislative process through a democracy, and public opinion. Although ratification through a federal state can be complicated and slow, it increases stability and credibility.

Additionally, the current environment poses grave tension due to the urgency of this global threat and requires a hastened ratification of the KP. My research examines the domestic factors that affect Washington's stance on multilateral agreements to combat climate change. Considering that there is a multinational effort to combat climate change through the Kyoto Protocol, the U.S. should sign on to the agreement.

Literature Review

Domestic factors such as democracies, presidency, and public opinion impact global participation in climate change policy. In multiple studies, scholars provided their opinions on factors that prevent the U.S. from international participation in combating climate change. Domestic factors such as the decentralized decision-making process in a federal system impact the international treaties that are ratified. Sarah Fisher (2005) states that in nations with a federal system, unlike unitary nations, the likelihood and speed of ratification depends on domestic factors that influence environment policy decisions. Battig and Bernauer (2009) admit that democracies induce a positive output on political commitment; however, measured emission levels and trends are ambiguous. Relevant to the controversy of domestic institutions on international cooperation, democracies provide more global goods.

As far as domestic factors, a president's behavior also influences foreign policy. Amy Below (2008) sheds light on the decision-making process of U.S. presidents on ozone and climate change and argues that it varies depending on the level "environmentalism" of each president. The United States' domestic and international efforts to combat climate change are insufficient for the current environmental distress. The U.S. has not ratified the Kyoto Protocol agreement due to these domestic factors, which many scholars have argued over. As a major contributor to the issue of excessive pollution, the U.S. should avoid any domestic factors preventing the ratification of the KP agreement.

Historical Significance

The U.S. retains a leading role in industrial activity that drives the excessive contribution to carbon emissions, but it is reluctant to act on

stringent mitigation, especially through the KP. Negotiations for a global climate change effort began in 1992 with the adoption of the UNFCCC (Andersen, 2015). The Kyoto Protocol, which emerged from the UNFCCC, is a global climate change agreement that was adopted on December 11, 1997 and served the purpose of emission reduction targets. The rigorous work of the KP is precisely the reason that the U.S. should adhere to its regulations, especially since the U.S. had been regarded as an industrial superpower in terms of its role in the global economic power structure. When the world is in need of negotiation however, the U.S. fails to collaborate on one of the most globally pressing issues: climate change.

There are many competing establishments in place fighting to combat climate change, including the Low Carbon Growth Partnership (LCGP), Asia-Pacific Partnership (APP), United Nations Environment Program (UNEP), and even former President Obama's joint announcement with China. The international community has taken initiative in securing meaningful change through many international agreements. The U.S. refuses to work with other nations and participate in the KP, an international agreement that attempts to bring significant change to protect the climate (Gerston, 2009). The Kyoto Protocol in particular has "heightened the expectations for large-scale collective action with stringent mitigation measures" to combat climate change. The 160 nations signing on to this agreement include 6 out of 8 of the highly industrialized nations (Laub, 2014). The efforts toward environmental change are ongoing, as the UNEP states:

After ten days of tough negotiations, ministers and other highlevel officials from 160 countries reached an agreement this morning on a legally binding Protocol under which industrialized countries will reduce their collective emissions of greenhouse gasses by 5.2%. The agreement aims to lower overall emissions from a group of six greenhouse gases by 2008-12, calculated as an average over these five years. (The United Nations Framework Convention on Climate Change, 1997, p. 1)

A nation that has largest economy and is the second largest emitter has yet to sign onto the agreement (Obama at U.N. Climate Change Summit, 2014). The U.S. has isolated itself from the rest of the world on an issue that we cannot afford the false luxury of ignoring any longer (Gerston, 2009).

The UNFCCC holds developed countries as primarily responsible for the high levels of Green House Gas (GHG) emissions. For the treaty to go into effect, it needed 55 industrialized countries to cut to 5.2% below their 1990 levels of GHG emissions. During the first commitment period, there were 37 signatories (United Nations Framework Convention on Climate Change, 2014). Responsible for 36% of emissions in 1990 (Walsh, 2004), the United States refused to sign on to the treaty and still continues to do so.

Domestic Factors

Although the environment is not a national security issue, the domestic process of ratification of the KP should be urgently addressed because climate change is certainly a national and global threat. The level of urgency assigned to the KP is due to its consideration as "low politics" or not high on the political agenda. Federalism has a seeping influence on decision-making and the ratification process of international treaties such as the KP. Federalism is defined as nations that consist of powerful institutionalized subunits that have jurisdiction in the national government. It can also be described as, how freely the government functions (Haftel & Thompson, 2013). Domestic groups must reach an agreement for jurisdiction to be made at an international level (Fisher, 2015). Federalism is a factor of domestic politics that impacts foreign policy. Fisher defines "low politics" as issues unrelated to national security (such as terrorism). Since environmental issues are considered "low politics" (Fisher, 2015), this impacts the way domestic forces reach decisions on international agreements (Jenkins, 2003).

Domestic forces leverage international cooperation and a state's jurisdiction with respect to the international system. International agreements involve a two-stage process in which participation is the ratification stage and deciding on the level of participation is the implementation stage (Bernauer, Khalbenn, Koubi, &Spilker, 2010). Treaties are legal obligations; signing onto a legal agreement means credibly committing to factors such as democratic reform, human rights, and the protection of foreign investors. Without legal obligations, commitments are unlikely and fragile because government preferences can change or leadership can turn over. The ratification and implementation of the KP through domestic institutions is necessary for the agreement to be

fully committed to. This explains why some treaties are instantly ratified and others take years to gather signatories (Haftel & Thompson, 2013).

To move forward from political commitments such as the ratification of the KP agreement to actual implementation of the policy and GHG emission reductions, the U.S. must disregard domestic issues constraining the adaptation of the KP agreement. Domestic institutions contribute to complications and slow down ratification but increase the stability and credibility of policy. One study argued that democracies have a more positive impact on global public goods such as climate change and GHG mitigation than other kinds of political institutions. The role of democracy makes policy output stronger even though policy outcome is not (Battig & Bernauer, 2009). Nondemocratic states have a tendency to sign on and ratify such agreements but underprovide the public goods (Olson 1965, McGuire, & Olson, 1994). Empirical testing on over 185 countries found that democracies show a sign of greater political commitment to global public goods. However, their outcomes are ambiguous due to the negative effect democracies have on GHG emissions from transportation. These issues include the free-rider problem, low long-term benefits of climate change mitigation, (Battig & Bernauer, 2009), federalism, and the slow domestic process of ratification preventing efficient emission reduction. In domestic institutions, the ratification of a treaty is a very difficult process because of costs and complications.

In addition to these difficulties, disagreements about the role of environmentalism among the executive and legislative branches and public opinion also impact political decisions about the KP. The KP failed to be ratified under the Clinton and Bush administrations. During the Clinton administration, the legislature was completely unsupportive and there was domestic opposition to the KP agreement. This led Bill Clinton to have a representative sign the agreement but not ratify it (Below, 2008). In cases when presidents know they have no legislative support to back up their signature, they do not sign on or ratify agreements as they acknowledge that the bill will not pass and get vetoed. Knowing the Senate had clear opposition to the KP, Clinton made an effort to rely on his executive powers to continue the environmental agenda (Vig, 2006). Clinton proposed a 5year \$6.3 billion package of tax breaks and research funding (Below, 2008), directed the federal government to reduce petroleum in federally owned

vehicles, and reduced GHG emissions from federal buildings (Layzer, 2002). During his time in office, International Performance Computing and Communications Conference (IPCCC) reports showed 1998 as the warmest year and 1990 as the warmest decade. Clinton still did not receive any further legislative support (Below, 2008). Presidents face domestic institutional constraints similar to the ones Clinton faced.

Rather than domestic constrains, George W. Bush's link to the energy industry prior to becoming president only intensified the lack of progress in America's ratification of the KP. As the UNFCCC continued to meet annually, they noticed even more growth in rising temperatures and the anthropogenic affects that growing GHG emissions would cause. Despite the alarming findings, there was hardly any progress in reaching an agreement, and the U.S. was often blamed for this (Below, 2008). Bush disbelieved in the human effects on global warming and asked for further research and scientific evidence. Although Bush said that he would support climate causes during his campaign, he did not take measures according to his promises. This is due to Bush's negative environmental record. Bush worked with the energy industry and was a partner in a number of oil and gas companies before he became president. Furthermore, President Bush claimed to oppose the KP because he believed it was flawed and unfair due to the free rider problem, in which countries not signed onto the KP would receive benefits for combating climate change. In the text of a letter from the President to Senators Hagel, Helms, Craig, and Roberts, President Bush wrote:

I oppose the Kyoto Protocol because it exempts 80 percent of the world, including major population centers such as China and India, from compliance, and would cause serious harm to the U.S. economy. The Senate's vote, 95-0, shows that there is a clear consensus that the Kyoto Protocol is an unfair and ineffective means of addressing global climate change concerns...As you also know, I support a comprehensive and balanced national energy policy that takes into account the importance of improving air quality. Consistent with this balanced approach... Any such strategy would include phasing in reductions over a reasonable period of time, providing regulatory certainty, and offering

market-based incentives to help industry meet the targets. (Bush, n.d.)

Bush thought it was unfair that the KP exempts about 80 percent of the countries globally and left a burden on developed nations to reduce their emissions while leaving the requirements for developing nations different (Below, 2008). He seemed to have less opposition for the KP issue and more concern over the economy because he claimed that his approach offered market incentives. Opposed to taking responsibility in combating climate change, Bush geared toward supporting the energy industry and oil companies.

Bush diverted the responsibility of America being a major contributor to the issue by playing the blame-game and instead bringing attention to India and China's exemption. Having a past with the energy and oil industries, he of course brought attention to short-term economic hindrances and the free-rider problem rather than giving consideration to the time and life-threatening intensity of climate change. In response to Bush's free-rider concern and disbelief in climate change, America's significant contribution to pollution can also be viewed as a reverse freerider issue in which the rest of the world suffers for emissions that they have not caused. If states were to be equally and seriously affected by the free rider problem, they would also be reluctant to contribute to such global public goods.

The American public is also skeptical about the disastrous consequences of anthropogenic climate change. Significant and growing portions of the U.S. population do not believe in the global threat regardless of all the research and evidence provided (Nagel, 2011). Public opinion is a domestic factor that restricts representatives from honoring international commitments (Tomz, 2002). Concern about climate change and belief in scientific evidence had a staggering decrease four years after the Intergovernmental Panel on Climate Change released a report bringing global attention to the negative consequences of the changing climate, even after this report was widely publicized in the film, *An Inconvenient Truth* and Al Gore received an Academy Award and Nobel Peace Prize. Joane Nagel from the University of Kansas claims that the vast ignorance of the deniers of climate change should not matter in American politics (Nagel,

2011). The health and lives of the American public, as well as the world, are at stake due to the deniers of climate change and especially those concerned about the short-term effects related to the economy of industries. In respect of the fragile state the global environment is currently in, America should set aside concerns of corporate profit, the free rider problem, other countries, and a president's environmental interests to pay special attention resolving the issue.

Importance of International Cooperation

Climate change is one of the most complex and important issues facing the world today that requires critical attention. More than 20 years of UN climate resolutions have failed due to lack of international cooperation. The UNFCCC has not only recognized that there is a problem, but has also worked toward a lofty and specific goal, gave developed nations the duty of leading cooperation, directed allocate developing countries to funds for climate change activities, and most importantly, acknowledged the vulnerability of all countries to the effects of climate change and called for special efforts to adopt this agreement. Former President Obama's joint announcement with China on reducing emissions and making progress in "developing a wide range of initiatives that reduce greenhouse gas emissions" was not sufficient to deal with the increasingly dangerous and fragile state of the environment (The White House, 2015). Adopting the KP's stringent goals for emission reductions is required for crucial environmental improvements.

International organizations help solve problems of environmental degradation and are key elements in building international governance systems. Scholars pay special attention to institutionalized efforts to increase international cooperation (Bernauer, et al., 2010). Pressure from participation in international organizations, treaties, or governance systems has a positive impact because they promote good behavior. For instance, domestic governments require the cooperation of citizens in order to control environmentally unfriendly behavior. Similarly, cooperation in an international governance system serves the purpose of harmonizing institutions (Drenzer, 1998) and prevents states from deterring environmental participation (Stein 2008). Laws and regulations of every

state allow prosecution of individuals who commit an offense against the values of that state. Fear of prosecution or punishment encourages individuals to abide by laws. Corresponding to the international level of governance and policy, participation in the KP agreement acts as a law, and those countries disobeying the law face consequences. Therefore, the KP promotes a commitment to environmental change because of fear of the consequences. If there is international cooperation in the economic (such as trading), social (human trafficking), and security (terrorism) sectors, then why not in the environment sector? As the second largest contributor to pollution (Sources of Greenhouse Gas Emissions, 2017), the United States' actions are similar to a misbehaving citizen escaping governance.

Therefore, membership and adoption of rules and regulations of the KP benefit not only the U.S. but also the world as a whole. Failure to participate can have an "audience cost," such as reputation loss at home and abroad, a snowball effect (other countries refusing to ratify the agreement), and loss of credibility. Taking responsibility by cooperating can be beneficial in reviving respect as well as the status of being the superpower that has been a guiding light for so many countries since the Industrial Revolution. Globalization is a prominent topic of discourse in politics (Bernauer et al., 2010) and climate change is a test of global leadership (Kerry, 2014). These arguments are important in terms of cooperation. As Kerry states, "no single country can solve climate change" (Kerry, 2014, p. 1). As the climate situation worsens, the U.S. may incite retaliation from other countries that could argue that America is not taking responsibility for its contribution to the pollution problem. The loss of credibility and reputation can also seep intolerance into other policy issues as well. For example, if America does not cooperate in environmental issues, other nations may retaliate by abstaining from cooperation in national security issues that are important to America. However, by working on the large portion of carbon emissions that America produces, we can take a significant step toward the Kyoto Protocol's lofty goal of combating climate change.

Domestic factors play a prominent role in constraining the ratification of this agreement; the U.S. can accomplish these goals by bringing significant attention and importance to reducing carbon emissions. Regardless of the fact that federalism, the slow process of ratification,

public opinion, and disbelief in global warming conflict with the adoption of the KP, the U.S. can still take the lead. America can influence nations not signed on to the KP agreement to join by ratification and implementation in our own nation first. Those states that do sign onto the KP but do not reach emission reduction goals could begin making serious efforts, in essence viewing the U.S. as a superpower whose values they follow. Furthermore, as one of the most pressing global issues present today, climate change calls for executive action. The U.S. legislative and executive branches can take initiative on the issue by pushing the policy on their agendas. This can be accomplished by addressing the issue and policy extensively in speeches, leading to greater congressional and public attention and creating an efficient process towards ratification. Supporters of the KP can also bring attention to the issue by advocating through mass media. From the national newspaper to local television, mass media is a compelling public agenda builder and acts as a microphone to policy makers (Gerston, 2008).

The U.S. should avoid domestic forces affecting Washington's stance on the KP and sign onto the agreement. Combating climate change through the adoption of this agreement is beneficial to the U.S. and the entire world. As one of the largest polluters, the U.S. needs to take responsibility for the GHG emissions they are contributing to, sign onto the agreement, and implement climate change mitigation. International cooperation is necessary for success in the globalized world. The U.S. is seen as a superpower and should maintain this status by taking responsibility and directing others to ratify and implement the agreement as well. Resolving climate change—regardless of many regions of the world free riding this public, global good—is better than having no world at all. Standing on the tipping point of the crisis, there is no time to wait.

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Culturally Competent Health Education in African-Americans' Faith-based Communities for Better Health Outcomes: A Literature Review

Biography

Anne is a first-generation *immigrant who came to the* United States from Cameroon. *She is a Nursing student at San* José State University working toward her Bachelor of Science in Nursing. Anne became a McNair Scholar in 2016, and she plans to pursue a Ph. D in Nursing. Her current research interests include *healthcare inequality,* underserved populations, preventive care, and obesityrelated chronic illnesses. She hopes to use her interest in scientific investigation to improve the health of the less privileged in our society. Under the mentorship of her academic mentor and guidance from the McNair Scholars program, she nurtures and strengthens her research and academic skills, which are critical for her future academic endeavors. She is grateful to all the McNair staff for their dedication and support for minority students like herself. In her free time, Anne loves spending time with her husband and son.

Culturally Competent Health Education in African-Americans' Faithbased Communities for Better Health Outcomes: A Literature Review

Abstract

Obesity is a compelling health issue among African-Americans, who have the highest prevalence of excess weight among all ethnic and racial groups in the United States. This soaring obesity rate contributes to poor health outcomes and significantly inflates the risks for many chronic diseases, including cardiovascular diseases, diabetes, and certain forms of cancer. The literature provides evidence for the success of health programs aimed at promoting healthy behavior and lifestyles in African-American faithbased organizations, as the influential role of churches in African-American communities is well documented. However, few studies have investigated the criteria essential for improved efficiency of health interventions addressing the problem of obesity in the church-based environment.

This paper examines the sociocultural and environmental factors associated with enhanced efficiency of health-promotion programs to reduce obesity in African-American faith-based communities. The databases PubMed, CINAHL Complete, Cochrane Library, and PsycINFO were searched, and ten relevant articles published during the last five years were selected. The findings corroborate prior research about the instrumental role of churches to promote a healthy lifestyle and reduce obesity among African-Americans. We identify that a partnership between health educators and the community is crucial to achieve a high success rate in church settings. These results indicate that better success is achieved when the church leadership and churchgoers' input are integrated into the program's design. Furthermore, health educators need to have a good grasp of the participants' cultural perceptions, understanding, and expectations of obesity. We recommend that future researchers examine the cultural and spiritual strengths of these faith-based communities and the best strategies to use in order to achieve long-term weight loss.

Key words: African-Americans, obesity, faith-based, culturally appropriate interventions

Introduction

Health-promotion programs in faith-based organizations offer several beneficial health outcomes. This non-traditional environment is increasingly used to deliver community health education because it provides the opportunity to reach a wide range of an underserved population, to deliver culturally appropriate interventions, and to promote sustainable behavior modification (Fallon, Bopp, & Webb, 2013). Within African-American faith-based communities, health education programs remain limited despite substantial evidence from the literature indicating that it has several advantages. Important barriers to these health programs include financial limitations, scheduling conflicts with church activities, and congregations' lack of interest. These barriers contribute to the low utilization of African-American faith-based communities to promote health (Fallon et al., 2013; Lancaster, Carter-Edwards, Grilo, Shen, & Schoenthaler, 2014). Nonetheless, Lancaster et al. (2014) argue that in African-American churches, health programs focused on weight management and weight-related behavior offer substantial benefits for addressing the obesity issues which disproportionately affect this population.

Health Education in African-American Faith-based Communities

Obesity rates remain on the rise around the world, affecting both underdeveloped and developed countries (Prentice, 2006). In the United States, the obesity rate has doubled in the adult population since the 1960s, increasing form 13.4% to 35.7% (U.S Department of Health and Human Services (HHS) 2012; Flegal, Carroll, Kit, & Ogden, 2012). Altogether, the overweight and obesity rate now exceeds 68% in the U.S. adult population. This trend remained slightly stable over the past decade and does not show any signs of substantial regression (U.S Department of Health and Human Services, 2012, Flegal et al., 2012; Mozaffarian et al., 2015). The incidence of obesity is significantly higher among African-Americans: 38% of men and 54% of women are obese, and 10% of African-Americans suffer from extreme obesity; that is, having a Body Mass Index (BMI) of 40 or more (U.S Department of Health and Human Services, 2012; Mozaffarian et al., 2015). In the African-American population, obesity is double that of White Americans, who average a 32.6% obesity rate (Mozaffarian et al., 2015).

Furthermore, across all races and genders, Flegal et al. (2012) found that, among ethnic minorities, African-American women and Mexican-American women had a higher increase in obesity between 1999 and 2010. These alarming figures come along with staggering medical expenditures and health costs.

The Cost of Obesity in the United States Financial Impact of Obesity

Between 1987 and 2001, obesity was responsible for a 27% increase in inflation-adjusted medical spending. The treatment of diabetes, hyperlipidemia, and heart disease accounted for the majority of this health cost rise (Thorpe, Florence, Howard, & Joski, 2004). Furthermore, the medical cost for obese individuals is 37% higher than the healthcare cost of people with a normal body weight (Thorpe et al., 2004). The medical spending growth appears to mirror the surging trend of obesity over the past decades. Finkelstein, Trogdon, Cohen, and Dietz (2009) reported that the annual health spending attributable to obesity was estimated to be \$147 billion in 2008, which contributed to a 9.1% increase in all medical expenditures. Several studies indicated that the current obesity epidemic is a major driver of the soaring cost of medical spending in the United States. For instance, Tsai, Williamson, and Glick (2011) found that, compared to individuals with a healthy weight, the yearly direct medical cost of overweight and obesity per-person are respectively \$266 and \$1723 higher. Elevated body weight has a substantial impact on inpatient and outpatient medical expenses; the most significant costs are attributed to obesity-related diseases that demand extended treatment (Atella et al., 2015; Li, Blume, Huang, Hammer & Ganz, 2015). Cawley and Meyerhoefer (2012) reported that in the United States, 209.7 billion dollars are spent annually to treat obesity-related diseases in the adult population. This figure, which represents one-fifth of the national healthcare expenditure, is projected to keep rising alongside the rate of obesity (Cawley & Meyerhoefer, 2012).

Health Impact of Obesity

Obesity remains a significant, yet modifiable, risk factor associated with many serious health issues. Obesity heightens the risk of several chronic diseases, including hypertension, cardiovascular diseases, type 2

diabetes, and certain forms of cancer (Hammond & Levine, 2010). Obese individuals also experience a decreased quality of life and higher rate of mortality. These negative health consequences are pronounced among minority populations, who often have less access to health care along with a higher rate of obesity-related comorbidities (Liao et al., 2011). Consequently, it is no surprise that a report from the Center for Disease Control and Prevention (2011) states that the rate of hypertension among African-Americans is 38.6%, a value that surpasses the prevalence of hypertension in the overall U.S. adult population.

Not only are African-Americans disproportionately affected by the obesity epidemic, they equally register some of the lowest access to quality health care and the highest mortality and morbidity rate of preventable chronic diseases. As Liao et al. (2011) point out, ethnic and racial minority populations still lag behind in access to adequate health care, even though some progress has been achieved to eradicate healthcare inequality and to improve the nation's health. Until the healthcare system implements sound strategies to counteract the woes inflicted on marginalized communities by poor access to health care, obesity and correlated illnesses could continue to burden the most vulnerable portion of the population, including ethnic minorities such as African-Americans.

The Importance of Churches in the African-American Population High Church Attendance Rate among African-Americans

Religious engagement and participation rates remain high in the United States and even more so among African-Americans who report a significantly higher level of church affiliation compared to other ethnic groups. A sharp contrast exists between African-American and Caucasian populations in regards to religious affiliation, with African-American people two-times more likely than Caucasians to be members of a religious group (Krause & Hayward, 2013). In addition, African-Americans report more consistency of church attendance and higher practice of religious activities—including prayer and worship services—than all other racial or ethnic groups in the country (Krause & Hayward, 2013). Therefore, it appears that religion and spirituality are solidly entrenched in black culture and remain a prominent element in the lives of African-Americans, which

has been proven to enhance healthy behavior (Fitzgibbon et al., 2005; Dodor, 2012).

Common Role of Churches: Spiritual and Social Support System

According to Taylor, Lincoln, and Chatters (2005), African-American churches play a multifunctional role in the lives of their members. Churches are the cornerstones of African-American communities due to the social assistance they provide to their members. These religious institutions actively promote their members' welfare by investing in their education and health. They also provide for their socioemotional needs, such as advocacy for family cohesiveness and stability. Another way churches are pivotal in African-American communities is that they constitute major support networks on which its members rely to meet essential social needs, including encouragement and companionship (Taylor, Lincoln, & Chatter, 2005). Researchers argue that such a safe and trustworthy environment where the individual has a sense of belonging is a vehicle for the promotion of positive behavior change. Churchgoers can also find a variety of spiritual resources that strengthen their belief system and have a positive impact on their personal and social wellbeing.

To achieve long-term weight-loss results, it is essential to design culturally competent programs with interventions that are sensitive to the needs and realities of the African-American community (Cowart et al., 2010; McClelland et al., 2016). The powerful role church and faith play in the lives of African-Americans is well understood by healthcare workers. Nonetheless, the healthcare system underestimates and underexploits this asset in its endeavor to promote health equity. Increasingly, researchers corroborate the finding that faith-based institutions are crucial avenues that the health system needs to mobilize to improve the health of African-American individuals (Giger, Appel, Davidhizar, & Davis, 2008; Condrasky, Baruth, Wilcox, Carter, & Jordan, 2013; Fallon et al., 2013; Lancaster et al., 2014). In this perspective, Condrasky et al. (2013) argue that the social structure of African-American churches constitutes an excellent milieu to deliver health-promotion education due to their structure and function. Researchers can capitalize on the health aspect of the mission statement of these churches to gain access to the population and to easily recruit and track participants for health-promotion programs (Condrasky et

al., 2013). According to Fallon et al. (2013), faith leaders are essential partners "who strongly influence intervention reach, adoption, implementation and sustainability" (p 134, para. 19), and their collaboration is a potent force that health educators should utilize.

Conceptual Framework

Bridging the profound health disparity in underserved communities remains a major challenge to the nation's healthcare system. In an effort to increase minorities' access to quality healthcare and to mitigate the conditions that disproportionately affect them, the National Institute on Minority Health and Health Disparities (NIMHD, n.d) recommends using Community- Based Participatory Research (CBPR). The NIMHD posits that "the CBPR Initiative seeks to incorporate a synergistic blend of research and outreach" through an inclusive approach set forth to gain the total involvement of the members of minority groups and abate their distrust of the scientific community (National Institute on Minority Health and Health Disparity, n.d.). Contrasting the limitations of the traditional research models that hinder the success of health interventions, Wallerstein and Duran, (2006) assert that CBPR is an "alternative research paradigm" (p 312, para. 1) that holds promising potential to reduce health inequality.

In the CBPR research framework, the research community or participants are integral and active partners of the study from start to finish. This research model allows the research participants or the community involved to contribute from the design and conception phase through the interpretation and dissemination of results. The process actively engages the community members, as they are no longer mere participants or subjects of the research, but more importantly, crucial allies in finding durable solutions to their health issues. The CBPR research model sets a platform for the community and the researchers to collaborate as equal partners. The community can thereby mobilize its unique strengths to address the complex health challenges facing them with the help of healthcare experts. (Berge et al., 2016). Moreover, Berge et al. (2016) argue that the investigators learn just as much as the community members and the participants of the research project. Because the stakeholders own the full process of the research, the results generally translate more efficiently into

practice. From its commitment to the partnership, the community easily adopts and readily implements the findings of the study to achieve better health outcomes.

Discussion

Training Grounds for Health Promotion

Gaining access to the population is a significant factor in the strategy to address the needs of specific communities and to combat public health threats. The studies of Condrasky, et al. (2013), Fallon, et al. (2013), and Lancaster et al. (2014) corroborate literature and prior research about the essentiality of faith-based communities in carrying out health education and to promote healthy behavior. Churches, especially for African-American communities, are viable settings to reach people with limited or no access to healthcare. Besides affording ample access to the underprivileged population, churches possess strong structural, organizational, and spiritual power, which health professionals must recognize and capitalize on in order to improve the health of this population. Condrasky et al. (2013) acknowledged that health is an integral part of the mission of churches, while Fallon et.al (2013) noted that most church leaders deliver health promotion interventions mainly through counseling.

Even though these previous two investigations took advantage of different strengths or unique features of the churches, their results ascertain that healthcare intervention in faith-based communities produces a positive impact and promotes healthier outcomes. Furthermore, the authors of all three studies argued that gaining the collaboration of the clergy is essential to the success of the health program in churches. Faith-leaders hold a special place in the lives of churchgoers who seek their advice and support concerning not only their spiritual needs, but also their emotional and physiological well-being. This privileged position gives pastors and priests the ability to positively influence their congregations because they are both highly trusted and a role model. Consequently, these researchers recommended that community health educators partner with the clergy, gain their support, and engage their leadership role when designing and implementing health-promotion programs in faith-based organizations. Condrasky et al. (2013) found that these strategic partnerships were pivotal in the study they conducted in African-American faith-based organizations.

Partnership between Church and Healthcare Professionals

According to Condrasky et al. (2013), the success of their intervention-training the cooks of more than 50 African Methodist Episcopal churches to prepare healthy and nutritious food-depended upon a close collaboration between the trainers and trainees as well as the involvement of the church leaders. These results suggest that it was crucial that the participants in the health intervention did not feel alienated from the program. Rather, the program's layout must incorporate the communities' full and active participation and the intervention designed such that it meets the specific needs of the community. The likelihood that a population adopts a desired behavior change increases with their cooperation with program developers along with their active involvement in the health program. Condrasky et al. (2013) claimed that the support the pastors provided, to both the program and the cooks, was essential to gain the trust and interest of the communities. Along the same line, Fallon et al. (2013) argued that training faith leaders to deliver faith-based health counseling to their congregation increases the success of health intervention in churches. It appears, therefore, that health educators must exercise their best judgment and develop appropriate strategies to gain the trust and participation of the population at different levels so they are not mere recipients, but active partners.

Successful Strategies for African-Americans

Cultural Considerations

In contrast to the previous studies that value the participation of both the communities and faith leaders, McClelland et al. (2016) demonstrated that the success of health-promotion programs depends upon the cultural group's perceptions of health. In effect, they found that Arab-Americans and African-Americans hold opposite cultural expectations and norms regarding obesity. To the former, obesity is unacceptable and the members of this ethnicity are expected to have a healthy lifestyle and keep a healthy weight. To the latter, obesity or being overweight is normal in their culture and bears no stigma in their community. If being overweight or obese is expected and not a source of concern within a cultural group, how can weight-reduction programs designed for the general population be effective

in this group? McClelland et al. (2015) suggested that public health educators bridge the cultural barriers hindering their success in ethnic minorities. These authors indicated that health promotion within these communities must integrate cultural sensitivities to succeed in improving healthy behavior. African-Americans can benefit from health interventions in their communities provided that their cultural beliefs are factored into the program design.

Nutrition Education and Belief System

Interestingly, Lancaster et al. (2014) based their review on studies that focus on African-American faith-based organizations with more than 90% of participants belonging to this ethnic group. They concluded that health intervention in these settings positively impacted members of these communities. The congregation reported a significant decrease in their weight, an increased level of physical activity and consumption of fruits and vegetables, and a decreased caloric and fat intake. These results fall in line with our expectation that a health intervention in African-American churches that stresses nutrition education can successfully improve knowledge about healthy eating. African-Americans can ultimately improve their overall health if they practice healthy food habits and increase their intake of fruits and vegetables. Lancaster et al. (2014) also reported that the presence of a support system, either through group sessions or in one-on-one health counseling, was proven equally important to achieving positive weight-related behavior. Lancaster et al. (2014) highlighted that, in contrast to their hypothesis, both support systems produce similar success rates. They insist that public health practitioners identify and use the tenets of the communities' faith to enhance the success of health programs in this environment. The individual belief system is a source of spiritual strength that empowers people to engage in and to maintain healthy behavior. Paired together, improved nutrition literacy and the tenets of their faith can motivate and challenge members of African-American churches to embrace sustainable health change.

Conclusion

Obesity trends run alarmingly high among African-Americans and place them at high risk for too many preventable chronic diseases, a crisis

compounded by their limited access to healthcare. Health promotion programs in African-Americans' faith-based communities offer promising success to reduce obesity in this population and to improve health. The advantages of churches are two-fold: they allow easy access to this ethnic minority, and they have excellent organization and resources. Health educators should capitalize on these advantages to improve congregations' health status. Successful health intervention in these communities calls for a partnership with faith leaders in addition to the active participation of the members of the congregations. Success also mandates that health educators understand and integrate communities' cultural beliefs and expectations about obesity. African-American churchgoers are more likely to engage in healthier eating behavior if their knowledge and skills about a healthy diet increase. Since sustaining a behavior modification can be a daunting endeavor, it is essential to identify and incorporate the principles of the individuals' faith in health-intervention plans. Health-promotion programs appropriate to the cultural and even spiritual realities of African-American faith-based communities better serve their needs and increase the success rate of health intervention in these institutions.

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Alondra Varela

Major: Public Health

Dr. Jennifer Hartle

Asthma-Related Hospitalization and Emergency Room Visits in Oakland

Biography

Alondra's interest in health began when her grandfather was diagnosed with metastatic melanoma. Sadly, he was not well informed in the ways he could have lowered his risk of cancer and passed away without having the proper counseling for his condition. His situation inspired her to learn more about the science behind these diseases and how to prevent them. She will be attaining her bachelor's degree in Public Health at San José State University. Her goal is to become a college professor and a public health epidemiologist. Most of all, she wants to be in a career that makes health resources and education more available to everyone in the United States. She is committed to researching health inequalities in the Latino community and additional marginalized communities because she lives in Oakland, which is a city affected by health disparities. Thus, she has first-hand experience with environmental stressors. She hopes that through her graduate studies she will be able to identify distinctive stressful environments and health behaviors that contribute to different mental and physical outcomes in marginalized groups.

Asthma-Related Hospitalization and Emergency Room visits in Oakland

Abstract

The City of Oakland has seen diminished childhood asthma rates. During the last few years more children have been able to qualify for Medi-Cal and other health insurance plans under the Affordable Care Act (ACA). Local programs work together with Medi-Cal and ACA to reduce the number of symptoms related to asthma by making sure children from low-income communities have access to primary care, medicine, and treatment. Unfortunately, the asthma-related hospitalizations and emergency room visits among children have continued to increase. These rates are even higher in low-income communities located near highly trafficked areas. To investigate this phenomenon, this study is an in-depth literature review of the current journal articles detailing the preventative measures taken to decrease the risk of a child having to go to the emergency room or be hospitalized. The literature review included information on environmental and social factors that may contribute to increased risk of severe symptoms that required hospitalization.

This study found that more research is needed on how children interact with their health systems and their environment. Without follow-up after a child is discharged from the hospital, there is no guarantee that families will seek primary care, which leads to hospital readmission. Both the West Oakland zip code 94601 and the East Oakland zip code 94621 have higher hospitalization rates and emergency room visit rates compared to the county and other parts within Oakland. These residents are exposed to higher amounts of pollution because of the environment they live in. Pollution is a known trigger that worsens asthma symptoms. Many of the people living in these areas do not have the resources to move out to other neighborhoods because of their socioeconomic status.

Introduction

As of today, health-protective services that limit the amount of vehicle, industry, and power plant emissions and other sources of pollution

released near residential and school environments are lacking in lowincome areas of Oakland. Some of these communities are located near the Port of Oakland, the Union Pacific Rail yard, and several major freeways. In Alameda County, 7 of the 10 schools in the Oakland Unified School District are located 500 feet away from a major freeway (Green, Smorodinsky, Kim, McLaughlin, & Ostro, 2004). From the Bay Area Census for the City of Oakland (2010), I found that 28% of Oakland's population identifies as African American. The same census conducted in the year 2000 showed that 35.7% of Oakland's population had identified as African American (Bay Area Census, 2010). It is evident that there has been a decrease in the number of African American residents living in Oakland. Additionally, 18% of the residents in Oakland live in poverty while countywide only 11.2% of residents live in poverty.

As of 2008, 25% of Oakland's population was younger than 18 years of age. Of these children who live in Oakland, 28.6% are living in poverty compared to the United States value of 21.7% (U.S Census Bureau, 2015). For the purpose of this research I will focus on children who identify as African American who live in Oakland. Children of African American decent had the highest rates because their rates of asthma hospitalization are four to six times higher compared to other race/ethnicity (Community Assessment, Planning, and Education (CAPE), 2014).

This topic is important if there is a disproportionate risk of asthma in low-income communities in comparison to more affluent neighborhoods. As of 2015, 18.6% of children in Oakland have asthma. This statistic suggests that there has been a decrease from 2014 when 20% of children living in Oakland had asthma, but hospitalizations in East and West Oakland have increased in this same time period, so my hypothesis is that asthma rates are higher in these areas. Unfortunately, none of the websites provide asthma rates among children 5–17 years old by zip code. Therefore, on the basis of the data, one can hypothesize that there is a health disparity in the East Oakland and West Oakland areas in asthma-related hospitalization rates.

From 2012–2014, the emergency-department-visit rate for asthma was 1,101.2 cases per 100,000 people, compared to the Alameda county value of 649 cases per 100,000 people. There is an apparent rise of asthma-related emergency department cases in Oakland. In the West Oakland zip

code 94601, the rate is 981.2 per 100,000, and in the East Oakland zip code 94621 it is 1,713.5 per 100,000 (healthyalameda.org). Both of these areas are closest to the Port of Oakland, large freeways, and warehouse companies. Consequently, these areas would have a higher volume of vehicle traffic. What is triggering the number of asthma-related emergency department visits and hospitalizations if the number of children with asthma is decreasing in Oakland? In previous years, the number of children 5-17 years of age who were hospitalized for asthma was 229.3 per 100,000; this was 67% higher than the Alameda County rate. Over half of the asthma hospitalizations among the children 5 to 17 years of age in Alameda County were paid for by Medi-Cal. This is an indicator that there is a disproportionate rate of severe asthma symptoms that require hospitalization in the low-income communities. Additionally, African American and Latino children were more likely to be hospitalized for asthma than were non-Hispanic whites (Green et al., 2004). According to the report released by the alameda public health department African American and Latino children make up more than 60% of the hospitalizations rates by race/ethnicity (Community Assessment, Planning, and Education (CAPE), 2014).. This also shows that there is a health disparity amongst African American and Latino children in terms of the amount of pollutants they are exposed to that trigger their asthma symptoms.

Methods

This research addresses the question, "Do policies and practices such as placement of companies and highways in low-income communities relate to the increased number of asthma-related hospitalizations in East Oakland & West Oakland?" I thought the best way to determine this would be to provide an overview of existing evidence pertinent to this health issue. The search terms (Asthma AND West Oakland*), (Asthma and Hospital*) were applied to three bibliographic databases (CINAHL complete, Pubmed, and Google Scholar), and only English-language articles published between 2005 and October 2015 were included. In total, six articles matched the search terms and were reviewed based on their titles, index terms, and abstracts. I considered the matching articles for inclusion or exclusion based on their abstract, study type, and intervention objectives with respect to the full set of inclusion and exclusion criteria.

In order to have a fair comparison of asthma-related hospitalization rates, this research concentrates on the asthma rates of Oakland altogether against the zip code rates of West Oakland (94601) and East Oakland (94621). I collected statistics for Oakland asthma rates, air quality measurements, and demographic by zip code at healthyalamedacountry.org. This data portal contains statistics that are up to date with comparisons of health statistics countywide and statewide. This data helped me determine if there was a health disparity between different areas in Oakland.

Asthma-Related Hospitalizations and Emergency Room Visits in Oakland

There is an immediate need for public health education and promotion in East and West Oakland. In 2015, for East Oakland children aged 0–4, the rate of asthma-related visits to emergency departments (ED) was 1168.2 per 100,000 compared to the Alameda County rate of 929.0 per 100,000. For West Oakland children aged 0-4, the asthma-related ED rate was 1224.3 per 100,000 compared to the Alameda County rate of 929.0 per 100,000. East Oakland's hospitalization rate for 0–4 year-olds was 889.4 per 100,000 compared to the Alameda County rate of 421.9 per 100,000. West Oakland's hospitalization rate for 0–4 year-olds is 752.3 per 100,000 compared to the Alameda County rate of 421.9 per 100,000 compared to the Alameda County rate of 421.9 per 100,000 compared to the Alameda County rate of 421.9 per 100,000 compared to the Alameda County rate of 421.9 per 100,000 compared to the Alameda County rate of 421.9 per 100,000 compared to the Alameda County rate of 421.9 per 100,000 compared to the Alameda County rate of 421.9 per 100,000 compared to the Alameda County rate of 421.9 per 100,000 compared to the Alameda County rate of 421.9 per 100,000 compared to the Alameda County rate of 421.9 per 100,000 compared to the Alameda County rate of 421.9 per 100,000 compared to the Alameda County rate of 421.9 per 100,000 compared to the Alameda County rate of 421.9 per 100,000 compared to the Alameda County rate of 421.9 per 100,000 compared to the Alameda County rate of 421.9 per 100,000 compared to the Alameda County rate of 421.9 per 100,000 compared to the Alameda County rate of 421.9 per 100,000 compared to the Alameda County rate of 421.9 per 100,000 compared to the Alameda County rate of 421.9 per 100,000 compared to the alameda County rate of 421.9 per 100,000 compared to the alameda County rate of 421.9 per 100,000 compared to the alameda County rate of 421.9 per 100,000 compared to the alameda County rate of 421.9 per 100,000 compared to the alameda County rate of 421.9 per 100,000 compared to the alameda County rate of 4

Influencing Environmental and Social Factors

According to Yap, Gilbreath, Garcia, Jareen, and Goodrich (2013), children with a lower socioeconomic status had a higher mortality rate than more advantaged persons. Even though this study was conducted in the Los Angeles region, the findings are relevant because the Bay area is the fourth most traffic-congested area in the United States. These researchers found that in areas where lower socioeconomic-status groups lived, there was a stronger correlation between the amount of pollution and hospital admissions for respiratory conditions. Additionally, these families are more likely to live near high traffic areas that have higher amounts of air pollution and toxins (Yap et al., 2013).

The median household income from 2010–2014 in Oakland was \$52,962. In comparison, the total income during those years in East Oakland (94621) was \$30,528, and in West Oakland (94601) it was \$39,601. In 2014–2015, 35.8% of people living in East Oakland (94621) were living below the poverty level compared to 12.9% of people living below the poverty level in Alameda County. In West Oakland (94601), 28.6% of people were living under the poverty level compared to 12.9% of people living below the poverty level in Alameda County. On the other hand, more people in Oakland are insured than were last year since the uninsured rate decreased from 24% to 19.7% while the population living in the zip codes I studied remained the same. The lack of insurance may not be a priority factor affecting the higher asthma-related hospitalization and emergency visits in East and West Oakland.

An article by Kim et al. (2008) mentioned that children living near highly trafficked areas are more likely to suffer from adverse asthma symptoms such as reduced oxygen capacity and panic attacks. This study measured the amount of traffic pollutants and recent episodes of asthma and bronchitis. Kim et al. (2008) found a variation of air quality between different areas in the same cities of the Bay Area. California has one of the strictest air quality regulations and vehicle pollution standards in the nation. However, due to the fact that homes are located near areas with higher emission particles and toxins, the highest risk of adverse asthma symptoms was for children living within 75m of a freeway/highway (Kim et al., 2008).

On a scale from 1–4, the American Lung Association ranked the annual particulate pollution of Alameda County a 4 due to its low air quality. They rank this by measuring the amount of particulate matter in the environment. Inhaling small toxic particulate matter can negatively affect people with asthma or other cardiovascular problems. In extreme cases it can lead to premature death (Air Resources Board, 2016). This rank is also determined by the number of days that the particle solution exceeds the U.S. standards of air quality within the given year (healthy alameda county, 2017)

A study done by the California Air Resources Board found that diesel concentrations in West Oakland were three times higher than in the San Francisco Bay area as a whole. West Oakland residents are also exposed to nine times more diesel particles in a given year than others living in

nearby cities (Green et al., 2004). In Alameda County, industrial chemical and fuel release sites in low-income communities are four times higher than in affluent neighborhoods (Alameda County Public Health Department, 2015). Air pollution does contribute to increased asthma hospitalizations and asthma onset in children, and it can ultimately affect the long-term development of lungs. There is a disproportionate burden of chemical and fuel release pollution in this area; therefore, these communities disproportionately suffer from disease complications and deaths (Alameda County Public Health Department, 2015). The residents of these areas are exposed to higher amounts of pollution because of the environment they live in. Many of the people living in these areas do not have the resources to move out to other neighborhoods because of their socioeconomic status.

Medical Coverage, Insurance, and Overall Healthcare Quality

The majority of emergency department (ED) visits for children living in Oakland are related to asthma. In Alameda County, more than half of the children's asthma-related hospital visits were paid for by the federal government (Alameda County Public Health Department, 2015). This is an indicator that there is a disproportionate rate of severe asthma symptoms that require hospitalization and ED visits in the low-income communities.

The Role of Public Health

There are a variety of programs in Oakland focused on decreasing the asthma-related hospitalizations and ED-visit rates and increasing the access to primary care in low-income communities. For instance, The Northern California Breathmobile Program is a community asthmamanaging program that focuses on regular preventative care. They provide a specialized action plan, medication, and care at no charge to all of their patients (Bay Area Environmental Health Collaborative, n.d.). They plan on counteracting asthma morbidity rate factors like inadequate control of management and inadequate control of asthma triggers by providing care to children who cannot afford treatment and medication. Their team of specialists visits K–12 schools and community centers every 4–6 weeks to see children with asthma.

Oakland also has a partnership called Bay Area Environmental Health collaborative (BAEHC). They currently have a partnership with six

environmental alliances and more than 30 organizations. Their goal is to reduce the amount of air pollution in all communities, especially those who are more exposed to it (Bay Area Environmental Health Collaborative, n.d.). They are at the forefront of the policy-making process and give a greater voice to residents to participate in governmental decision-making to strengthen air pollution policies at a local and regional level. Lastly, more than half of the asthma-related hospitalization/ED visits are paid for by Medi-Cal. With access to insurance, these children will have the opportunity to visit a primary care doctor, afford medication, and enroll in preventative treatment programs for their condition.

Conclusion

In conclusion, over the years the number of children with asthma living in Oakland has decreased while the number of asthma-related hospitalization and ED visits have increased in East and West Oakland. Studies show that there is a connection between the disproportionate amount of pollutants a child with asthma is exposed to and the increased risk of that child having episodic symptoms. After the Affordable Care Act passed, more children were insured. It seems that many of these families rely on the ED as a substitute for primary care. With the help of the BreathMobile and the BAEHC, Oakland can start finding ways to decrease the amount of pollutants that some groups are exposed to more than others. Additionally, programs like the BreathMobile can partner up with insurance companies and Medi-Cal to make sure their patients are going to a primary care pediatrician to reduce the number of children hospitalized for lack of follow-up and treatment.

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Heriberto Zavala

Major: Radio, Television, & Film

Minor: Mexican-American Studies

Mentor: Dr. Magdalena Barrera

"Yo No Cruse La Frontera, La Frontera Me Cruzo" (I Didn't Cross the Border, the Border Crossed Me)

Biography

Born in Valle de Santiago, Guanajuato México, Heriberto *Zavala is a graduating senior and a first-generation college student* at San José State University. Currently, he is completing his Bachelor of Arts degree in Radio, Television, & Film with a minor in Mexican-American Studies. He is a Peer Mentor for Mexican-American Studies at Peer Connections. In future research, *Heriberto will continue to pursue* a career in film. His educational goal is to obtain his Ph.D. in film in order to get into Hollywood and further diversify the industry.

"Yo No Cruse La Frontera, La Frontera Me Cruzo" (I Didn't Cross the Border, the Border Crossed Me)

Introduction

On a regular summer day in the Central Valley, it is about 107 degrees. When I work in the fields picking grapes in Bakersfield, California, it feels hotter than this. I often reflect on my experiences because I still pick grapes in the summer when I am on break from college. There is a huge truck that passes every hour or so to pick up the boxes of grapes with its big radio blasting "Somos Mas Americanos," a song from the band Los Tigres del Norte. It was the most beautiful work of art that I had ever heard. I remember clearly how those lovely lyrics froze in time and shocked me. I even stopped cleaning the grapes; I began paying attention to the song and its lyrics, allowing them to travel through my veins and find their way into my heart. I had never been more touched by a song the way that particular song struck me. I was surprised that I did not know which song it was if from Los Tigres del Norte. I was surprised because I am a huge fan of Los Tigres and I usually know the names of their songs. Finally, as I heard the line, "Yo no Cruse La Frontera, La Frontera Me Cruzo," I realized this was exactly how I felt about being an illegal immigrant here in the United States. Those words meant freedom to me, and once again Los Tigres del Norte proved to me why they are the best of the best, or as I would call them, El Jefe de Jefes (The Boss of the Bosses). The song, "Somos Mas Americanos" is a work of art, and every single one of its lyrics is tied to a history about my experiences, my family's experiences, and the experiences of countless others. Lyrics like those in "Somos Mas Americanos" touch people's souls and pierce their hearts because it speaks to the socioeconomic, racial hierarchy, racially biased politics, and laws against immigrant workers like myself in the U.S. Further than that, it educates listeners about the U.S./Mexican War and the Treaty of Guadalupe Hidalgo, where México lost its territory to the U.S., which explains the heated controversy surrounding the U.S.-Mexican border today.

Historical Context: Early 1900s and Immigration and Policies in the 1970s – 1990s

To understand why Los Tigres del Norte's lyrics resonate so deeply with Mexican immigrants, we must first examine U.S. immigration history, especially as it impacts Mexicans. Immigration of the Mexican people to the U.S. goes back to the 1900s, an era during the railroads and WWI. The railroads are one of the first factors that created a mass migration of Mexicans to the U.S.; one example is in 1907, when the U.S. was desperate for workers, specifically to work in mining, agriculture, and construction. The U.S. recruited workers known as enganchadores (the hook) from Guanajuato, Jalisco, Michoacán, San Luis Potosí, and Zacatecas (Massey, 27). With WWI going on, it halted European immigration, causing the cities of Chicago, Kansas City, and Los Angeles to rely even more on the enganchadores. Shortly after the war in the 1920s, the U.S. immigration policy for Mexicans was very lax. Even when the numbers of immigrants were lowering in the Western Hemisphere, in 1929, those numbers were never applied to México "whose nationals were free to enter without quantitative restriction and did so in large numbers" (29). Yet, despite immigration being very lax, the Great Depression was around the corner, which was an era of heightened monetary hardships across the nation. The Great Depression played a huge role in a series of deportations that reduced the Mexican population by 41% throughout the 1930s (Massey, 34). The article, "Domestic Dramas: Mexican American Music as an Archive of Immigrant Women's Experiences, 1920s-1950s" argues that in the 1930s, for the first time large numbers of immigrants decided to stay in the United States. Similarly, "At least half a million Mexicans settled permanently in San Antonio and along the border by the 1930s" (Ragland, 55). Also, Barrera argues that some scholars refer to the 1930s as the decade of betraval due to the forcible actions of the U.S. government to deport Mexicans regardless of their citizenship status.

Throughout the history of the U.S., every time something goes wrong with the economy, or problems emerge in the country, the U.S. tends to always point fingers at the immigrants. This raises the question, "Why can't Mexicans just go back to México?" However, this country needs immigrants since they are the ones who step up to do the jobs that many Americans are not capable of doing or are not willing to do, such as

the working on the railroads, in the fields, and in construction. Usually immigrants, in particular Hispanic communities, are the ones that tend to toil at most of the heavy work in America. Other low-wage jobs that Hispanic people do include being maids or the janitors in schools throughout the Unites States.

Another question should be, "Who feeds the country, especially in times of war?" During WWII, the U.S. needed farmworkers once again. In 1942, like the enganchadores program, the U.S. Federal authorities approached México for workers (Massey, 35). Therefore, on September 29, 1942, the era of the Bracero Program began (35). During WWII, the U.S. government recruited 168,000 braceros (36). Shortly after the war, the U.S. concluded that there were not enough braceros to work in the fields. The U.S. government focused on recruiting undocumented workers, which caused the undocumented community to increase. For example, in 1945–1950, 14,000 undocumented workers entered the country to work in agriculture. As one can see, this becomes an unstoppable pattern. Likewise, in 1951 during the Cold War, the situation in Korea was getting heated. This caused Congress to pass Public Law 78, giving permanent statutory basis to braceros (36). Then, when the Bracero Program fluctuated, the Immigration and Naturalization Service (INS) started raiding agricultural fields in the southwestern area of the United States. The INS arrested and deported undocumented workers. Ironically, before they deported them, officials from the U.S. Department of Labor retransported them back to the fields where they were arrested (37). At last, the Bracero Program came to an end in 1964.

Latinas/os are famously known for crossing the border in search of a better life. Little do they know that they come here to do America's hardest work. Similar to years past, Gonzales claims in his book *Mexicanos* that immigrants performed the work that U.S. citizens refused to do. More accurately, Mexicans are the largest group of immigrants in the U.S. The largest increase in undocumented workers occurred during the 1970s, when as James Diego Vigil states, the number of undocumented Mexicans rose from 2 to 12 million. In this decade, the average legal immigration from México was 60,000 persons per year (Gonzales, 226). These masses of people entering the so-called land of opportunity are what frighten many residents in the country. Americans

have this fear that they are losing their country. For this reason, in 1976, the number of deportees reached 781,000 (Massey, 45). Many immigrants who come to this country do not plan to stay here forever, and data over a period of 21 years proves this: between the years 1965–1986, of the estimated 28 million Mexicans who entered the U.S., only 4.6 million illegal Mexican immigrants settled there. During those years, out of the 28 million, 23.4 million are believed to have returned to Mexico (45).

In addition, Gonzales indicates that throughout the nation, the movement of people across the border was a source of continual and acrimonious controversy in the 1980s. In Mexicanos, Gonzales tells us that the demographer Jeffrey Passel for the Urban Institute in Washington D.C. argues that it is the greatest mass migration to the United States from a single country. This migration not only caused an increase in the numbers of the Mexican people, but the number of Latin Americans was also increasing rapidly. "Before the Immigration Reform and Control Act (IRCA) was instituted in 1986, those who did travel for work outside the Southwest often stayed temporarily, returning to México (many to border towns to work temporarily in maquila factories). The IRCA changed that pattern..." (Ragland, 16). Per Gonzalez, "The 1986 Immigration Reform and Control Act (IRCA)... attempted to deal with all the problems of immigration at once" (Rodriguez, 230). To go more in depth, there was also an increase in border patrol agents in the 1980s, causing many undocumented workers to settle in the U.S. Also, México continued to supply legal immigrants, 100,000–200,000 in 1990, and 126,561 in 1993. Despite the anti-immigrant sentiment across the nation during the deep recession in the early 1990s, every year in this decade an estimated two million Latina/os entered the country successfully. Of course, the Mexican population in 1990 was 80 percent of the Latina/os. The census revealed that "Latinos were on the verge of overtaking Anglos as the country's largest demographic group" (Gonzales, 242). Even the number of new Mexican-born U.S. citizens increased six-times more than the average between 1980 and 1993.

Later, the North American Free Trade Agreement (NAFTA), which linked Canada, México, and the United States and is "the largest trade bloc in the world," was introduced. (Gonzales, 231). It was not until November of 1993 that NAFTA was legislated into law. It went into effect

on January 1, 1994. In that same year, Proposition 187 denied illegal immigrants and their families healthcare, welfare, and public education. Throughout history we can see that since the 1900s and up until 1929, Mexicans entered the U.S. as "legal immigrants," working as enganchadores, miners, or on the railroads. Then, due to WWII, for 22 years they were seen as braceros because of the Bracero Program. Finally, from 1965–1985, they began to use the term "undocumented" more often to label most Mexicans working in the fields. (Massey, 51). Even though they were also undocumented before 1965, many immigrants could stay here and crossed the border whenever they wanted. However, many laws and policies such as patrolling the border with more bodies made it even harder for immigrants to cross to the U.S. in search of a better life or because of necessity.

Interpretation

To further deepen our understanding of this immigration history, we next need to look at how music has played a key role in enabling immigrants to express themselves. When I listen to Los Tigres del Norte's music, sometimes I cannot describe the feeling(s) that it creates within me. What I *can* say is that it causes my whole body to vibrate. Chris Strachwitz is a young man who migrated from Germany to the United States and is the founder of Arhoolie Records; he was the president of the Arhoolie Foundation. Strachwitz came to the U.S. during the eve of the birth of rock 'n' roll, but he instead listened to the music that spoke to his heart (Gurza, Clark, Strachwitz, 13). Similar to what I feel, Strachwitz describes music as having "a certain aura or feeling that I can't describe, in all those musical genres..." (18) He states that he fell in love with lowclass music the same way I fell in love with Los Tigres del Norte's music.

In the United States, Latina/o communities love to listen to merengue, cumbias, salsa, and banda, but many in the U.S. probably have not heard of norteña music or Los Tigres del Norte. Banda and norteña are Mexican music. Mexican artists account for almost two-thirds of Latin record sales. In the U.S., Mexicans and Mexican-Americans make up more than half of the Latino population. According to Elijah Wald, Mexican music is far and away the most popular Latin style in town. Even

if norteña is Mexican music, it still reaches massive groups of Latina/os, both in the U.S. and other parts of the world.

Norteña music emerged in the late 1960s as a cross-cultural phenomenon that connected communities and families of people from both sides of the U.S.-Mexican border (Ragland, 59). In the 1970s and the 1980s, the norteña music traveled back to México by way of the cassette. (17). This type of Mexican country music is one of the most popular styles in the United States and Central America. Los Tigres del Norte are the kings of norteña music; "Los Tigres are like Willie Nelson and the Rolling Stones combined" (Wald, 2). Their records sell in the millions, and their concerts pack halls throughout the North American continent. Their music became part of the Mexican culture. The reason it has not crossed over to Anglo fans is because it is accordion-driven polkas and waltz, it is oldfashioned, and their most popular hits are narcocorridos, which are ballads of drug trafficking (2). In addition, there is also a language barrier; therefore, Anglo fans may not understand what the songs express. Even if they knew what the songs say, some may still not like them since it questions their government in various ways.

On the other hand, Ragland argues that, "Perhaps it is more appropriate to look at norteña music and the working-class Mexican immigrant as together constituting both a blurring of boundaries that once define 'home' and 'abroad' and a merging of cultures and identities" (Ragland, 21). The author, Agustín Gurza, expresses that norteña music is a form of art that taught him the meaning of what it meant to be Mexican. Also, Gurza, Clark, and Strachwitz are known for preserving records of the folk music of México's working-class (Gurza, 3). Preserving records of music that resonate with Mexican people is the same thing as preserving their history and their voices-voices that would have been forever silenced (3). Simultaneously, norteña music makes its presence as "border" music and as immigrant Mexican laborers' music (Ragland, 22). In other words, norteña songs invoke solidarity and a collective identity of Mexicanidad. Their "real life" immigrant experiences give voice to the many immigrants in the U.S. whose lives are in the shadows (25). Today, many songs exploit the modern-day cowboy and the narcotraficante (25). Norteña groups focus more on the corrido. European polka and waltz and the huapango are the traditional rhythms of the corrido. The corrido

evolved during the first 30 years of the twentieth century (Ragland, 37). Moreover, "The period between 1835 and 1934 was a time of great conflict in the border region and the most fruitful period of corrido production" (43). Its historical roots lie in the northeast Mexican territories: Nuevo León, Tamaulipas, and Coahuila (44). Los Tigres corridos and narcocorridos took the music to the next level, and when they sang "Contrabando y Traicion," their music became trinational.

As previously mentioned, Los Tigres del Norte are the mastermind innovators of the narcocorrido tradition. They celebrate the hard work of the Mexican immigrant laborer while calling out the U.S. government for its role in rampant drug trafficking across the border (Ragland, 14). Likewise, Los Tigres music speaks to "the political, social, and cultural inequalities experienced by Mexican immigrant workers in the United States and their families and communities in Mexico" (17). Other topics their music encompasses are machismo, love, the LGBT+ community, and brotherhood.

Brief history of Los Tigres

Given the powerful role of music in Mexican communities in the U.S., it is easy to understand how Los Tigres came to prominence. The article "Hear the Roar," Marcela Rojas informs us that the five brothers and cousin, Oscar Lara, are from Rosa Marada, Sinaloa, México. They are the six members that form Los Tigres del Norte. Burr indicates, that, it all started one morning in 1965 when their father could not feel his legs; he had nerve problems and he needed an operation. For the Los Tigres to get money and pay for his operation, they started to sing in Los Mochis and play music for a dollar. On weekends, they would go to Mexicali and perform, going from club to club.

One day, when they went to the telegraph office to wire money to their parents, a man asked them if they were in a band. Then he said he knew a person who would take people to America to sing. They were asked to go sing in Soledad in a prison about sixty miles south of San José. They decided to take on the challenge, and from that moment a new, successful journey was coming their way.

In the article "Still Roaring After 30 Years," Ramiro Burr, and Rojas in "Hear the Roar" notify us that when they were crossing the

border, a border patrol guard gave them their name. The guard allowed them to pass and said, "I am going to baptize you Los Tigritos." The guard said you all are going to become big, which is why I am going to call you Los Tigres del Norte. Del Norte is because they were going to the north of California. When they arrived, Jorge registered them as Los Tigres del Norte. In Soledad, the brothers played "Cielito Lindo" and "Viva Mexico" to remind the prisoners of their home. When their legal status in the U.S. expired, they decided to stay as immigrants in San José, California in order to sing there.

However, staying in San José was only the beginning of their struggle. For instance, they did not stay there just to sing, but also because they had jobs. In an interview in YouTube, Jorge says to Carlos Loret de Mola that Oscar and Raul were gardeners. Hernán because he was the youngest, and Jorge, who was the oldest and only a teenager, decided to keep Hernán in school. Moreover, Jorge was a janitor at San José State University. Suddenly, according to Burr, and Rojas, one day Los Tigres had the opportunity to perform in the parade for the Mexican Independence Day; they were invited to go sing at a Mexican restaurant, El Paseo de las Flores. Their performance was broadcast on the radio, where an English man, Art Walker, heard them. Immediately, Art Walker approached them after their performance. In the same interview with Los Tigres del Norte and Loret de Mola, Jorge explained that at that time Art Walker came in like a lifesaver. Los Tigres were in despair because they had nowhere to live, and they needed money to send back to their parents in México. When Jorge told Art Walker their situation, he assisted them by offering them a place to live, and he helped them bring their mother to the United States. Hernán also claims that Art Walker discovered the style of Los Tigres del Norte. For one whole year, they all lived in one room, including their mother. Raúl, Jorge, and Oscar attended night school to learn English while the youngest, Hernán, enrolled in elementary school.

As one can see, Los Tigres were very fortunate, yet their music and story is what makes them unique and connects them to the immigrant community. They themselves were immigrants; thus, they have a direct experience with the immigrant community. For example, many Latina/os come to the U.S. in search of a better life, or what we call "The American Dream." The American Dream is exactly what Los Tigres accomplished

when they decided to stay in this country as immigrants in the late 1960s. In other words, Los Tigres chose to stay in the U.S. like everyone else, for better opportunities.

The interview reveals that during their early trajectory, Hernán, being the youngest, suffered quite a lot. At the age of seven, he started to go with his brothers to help them sing. It was not because he wanted to, rather, because necessity obligated him to do so. Hernán mentions to Loret de Mola that he did not have a normal childhood like the rest of the kids his age. He said that he would cry a lot because he wanted to be with his parents, which is understandable for a child at that age, especially because they were in the U.S. as immigrants. Therefore, they could not go back and forth between the U.S. and México. This caused them to not see their parents for four years. Likewise, they could not go back when their father passed away. Jorge, being only eleven years old when they started to sing in México, was in charge of all of them as if he was their father.

Again, in the interview, Jorge states that their brotherhood and the strong essence of a family was their key to success. Being only eleven years old, Jorge told Carlos that everything happened so fast. At his young age, he took on the mentality and responsibility of a father. Hernán mentioned that he sees Jorge as his brother, father, friend, and everything. Through their times of tears, their brotherhood was the only world they knew, they also knew that they had each other to move forward, just like many Latina/os and their families who come to the U.S. and do not know anything. They must stick together with their family, or sometimes with the people they cross the border with. When someone comes to the U.S. to work in the fields, he must learn from the beginning. One must learn how to pick grapes, oranges, kiwis, blueberries, and so on. Los Tigres experienced the same thing, but in a different field of work. For example, when Art Walker discovered their style, Los Tigres had to learn by themselves how to play the instruments. Nobody taught them how to play. Los Tigres's story only keeps getting brighter. It seems that a similar story from the past is resurrecting. Their younger brother, Luis, lives with Hernán. In other words, Hernán is taking care of Luis the same way Jorge took care of him during their childhood.

Even when Los Tigres already had a contract with Art Walker, their fame and success did not start right away. Like most things in life, it

took time. It took Los Tigres about four years to truly expand and make their music national. It was the year 1972 when Walker took them to Los Angeles to watch a songwriter performance. Los Tigres observed the performance of the song, "Contrabando y Traición." Jorge was surprised to see how much the audience loved it. They bought the song from that person and the rest is history. They also called that song, "La Camelia."

Burr, and Rojas specify that "Contrabando y Traición" exploded their career. The song had such a huge impact on their career, it even inspired literature and the Spanish writer, Arturo Perez Reverte. Reverte wrote a bestseller based on Contrabando y Traición called, *La Reina del Sur*. "La Reina del Sur" is a song from Los Tigres that later became a TV Series on Telemundo. Recently, in 2016, a new English series was created and translated into the "The Queen of the South." Los Tigres's songs are so powerful and interesting that many writers and producers often create a novel based on their songs, which later become a TV show. When Los Tigres started and even now, their music in San José, California is also a product of the culture of the Mexican immigrants in the state.

Likewise, Carlos Loret de Mola directly tells the viewers of his interview with Los Tigres del Norte that their music eventually reached other parts of the U.S. other than California, exploding and flying past all borders, and that is how they are known today. In, 2015, Los Tigres celebrated their 50-year anniversary as a band. 52 years later, Los Tigres are still impacting millions of people far beyond México. Wherever they stop, they roar, and they roar like nobody else. With the accordion, with different ways of presenting the voices that have never been done before in that genre, Los Tigres del Norte found their own unique sound. Now, norteña music is not only music for México. Rather, it is music for the entire world. They went from Sinaloa to Los Mochis, from Los Mochis across the border to California, from California to Texas, and from Texas they became the face of norteña music. They sing the themes of people who live in the U.S., of people who leave and come back. The Magazine Billboard catalogs Los Tigres del Norte as the most influential group of regional music in the entire world. It named them the "Rolling Stone Mexicanos." They won Grammys in all the categories.

In the 1960s, they were children who crossed the border to get to the United States in search of opportunity, and they found it. They had to

stay there as illegal immigrants. Fifty years later, the third biggest soccer stadium in the world, the Estadio Azteca (Aztec Stadium) and its audience are a testimony to Los Tigres's inspiring music. Los Tigres is much more than just a musical group because they sing about politics, immigration, violence, love, partying, and dreams.

Los Tigres Songs Lyrics: Mojados (Wetbacks)

Now that we have this background, we are in a position to analyze and interpret key songs that represent critical aspects of the Mexican immigrant experience. In 1986, the most influential band of the Regional Mexican music, Los Tigres del Norte released their album, *El Otro México*. "El Otro México" (The Other Mexico) is also the first song of their album. The lyrics of the song tell us the story and the reasons why the Mexican people cross the border, as well as how "El Otro México" symbolizes the remaking and reshaping of the U.S. through the hard work of the Mexicanos:

El Otro Mexico	The Other Mexico
que aquí hemos construido	that we have built here
en este suelo que ha sido	in this soil that has been
territorio nacional	national territory
es el esfuerzo	it's the effort
de todos nuestros hermanos	of all our brothers
y latinoamericanos	and Latin Americans
que han sabido progresar.	that have been able to
	progress.

Mientras los ricos	While the rich
Se van para el extranjero	they go abroad
para esconder su dinero	to hide their money
y por Europa pasear.	and walk through Europe.

The lyrical content of "El Otro México" touches upon the hot topic of the mass migration of people from México to the U.S., such as the 28 million Mexicans who entered the U.S. between the years 1965 and 1986 (Vigil, 214). The beginning of the song explains that one of the reasons

Mexicans immigrate to the U.S. is because of necessity-that we would never see a doctor or an engineer cross as braceros because they do not have the same necessity as the rest of the people in México who live in extreme poverty. Similarly, the 1980s-the same time frame that the song was released—is also known as the time of the greatest mass migration to the United States from a single country (Gonzales, 225). The people who make and shape the U.S. are the 4.6 million immigrants who decided to settle in this country. They are the ones who built the buildings, the same way the Indians were forced to build the Missions while the rich traveled to Europe to hide their money, as expressed by Los Tigres. For example, the word "construido" refers to the Mexicans and Latin Americans who work in construction to build the U.S. The fifth stanza breaks down "Mientras los ricos... esconder su dinero" as a symbol of the separation between social classes. The rich are making money and have all the time in the world to travel, while the hard working construction workers physically exhaust their bodies building America to make a living.

Another of their popular songs is "Vivan Los Mojados" (Long Live the Wetbacks). This was the first mojado-themed song to appeal to people on both sides of the border. "Vivan Los Mojados" "placed the marginalized Mexican laborer in the foreground of an expanding Mexican diaspora" (Ragland, 175). This represents a living history of the immigrant life:

Por que somos los mojados	Because we are wetbacks,
siempre nos busca la ley	the law is always looking
	for us.
por que estamos ilegales	Because we are illegal
y no hablamos el ingles	and we do not speak
	English
el gringo terco a sacarnos	the obstinate gringo
	throws us out,
y nosotros a volver	and we return

These lyrics say that mojados (wetbacks) are always being chased by the law because they are illegals, and they do not speak English. The song, which was released in 1976, happens to be the same year when the

number of deportees reached 781, 000 (Vigil, 214). Two years earlier, in "1974 the United Farm Workers Union even organized a 'wet line' with a 125-mile stretch of the Arizona-Sonora border in order to stop illegal immigrants entering the United States" (213). This is a symbol of how Mexican Americans separated themselves from the undocumented people. Cesar Chavez, who is known as one of the greatest leaders of the Mexican community, did not want undocumented immigrants to be part of the union. To further analyze the song, the mojado theme separates the Mexican immigrant worker further away from cultural assimilation and political socialization. Ragland argues that mojados are placed outside the authority and the power of the state. Their solidarity is formed through shared experiences of the struggle for survival and respect of their community.

Cuando el mojado haga cuenta	When the wetback goes on strike
de no volver otra vez	and decides not to return
	again.
Quien patapea la cebolla	Who is going to pick the
	onions,
lechuga y el vetabel	lettuce and beet,
el limon y la toronja?	the lemon and the grapefruit?
se hechara toda a perder.	All of them will spoil.

This part of the song gives power to the mojados as well as bringing attention to the Unites States. This goes back to what was previously mentioned—that mojados need this country to search for opportunity, and that the country needs the mojados. The song has a very direct tone, warning the U.S. that the country depends on the Mexican laborer. If the workers are ejected from the fields or sent home, there are going to be disastrous consequences. All the fruits and vegetables are going to go to waste; therefore, the owners of the fields are going to lose a lot of money that cannot be recovered because some fruits and vegetables only come once a year. In this case, the song reclaims the mojado identity, and instead of offending the immigrants, it mocks the authority of the border patrol and the U.S. immigration laws. In a way, it is deconstructing

the border patrol, illegal status, and the green card to strengthen the mojados by ignoring the obstacles that made them vulnerable.

In addition, "La Tumba del Mojado" (The Wetback's Grave) in 1984 captures the feelings of poor immigrants across the U.S. The song's translation into English does not need very much analysis. It clearly touches upon the living conditions of a Mexican immigrant worker who even begs the boss for the money that he/she has earned. In this song, the "wetback" has no choice but to work with the fear that he/she might or might not get paid. The green card is another example of how the U.S. restricted immigrants from working, also known as the people working in the shadows.

No tenía tarjeta verde	I didn't have a green card
cuando trabajé en Luisiana,	when I worked in Louisiana,
en un sótano viví	I lived in a basement
porque era espalda mojada	because I was a wetback,
tuve que inclinar la frente	I had to bow my head
para cobrar la semana	to collect my week's wages.

The music also refers to the border as a tortilla curtain. Mexicans sneak to the U.S. and they are seen as criminals while other people around the world such as French, Chinese, Greeks, and Americans travel to México freely and they are respected in the Mexican villages.

La rosa de Mexicali Y la sangre del Río Bravo	Mexicali's rose and the blood in the Rio
	Bravo
son dos cosas diferentes	are two different things
pero en color son hermanos.	but in color they are siblings.
Y la línea divisorial	And the dividing line
es la tumba del mojado.	is the grave of the wetback.

Next, the song uses a rose and the Rio Grande to symbolize the deaths of mojados who died crossing the border. The red color of the rose is the same color as the blood in the Rio Bravo, which makes them

siblings. Yet, because there is a line that divides them, it represents the suffering of the separated families in between two nations.

Los Tigres: Indocumentado (Undocumented)

In 1984, Los Tigres's other album, *La Jaula de Oro* moved in a different direction from the life of the mojado. The author Elijah Wald explains that mojados see life in the United States as something temporary from the perspective of poor, migrant workers. On the other hand, Wald defines the indocumentado as someone who has no plans to go back to their country (Wald, 158). The song "La Jaula de Oro" focuses instead on the middle-class immigrants:

Aquí estoy establecido	I am established here
en los Estados Unidos.	in the United States.
Diez años pasaron ya	Now, ten years have passed,
en que cruce de mojado.	since I crossed illegally.
papeles no he arreglado,	I have not gotten my papers,
sigo siendo un ilegal.	so I continue to be illegal.

"La Jaula de Oro" is a more serious song that deals with the issues of being undocumented, not mojado. It expresses the trials of those living in the United States. Even after ten years or more, they still cannot get their papers. The protagonist of the song has a good job, but he cannot reflect on what he has built. His reflection becomes painful, not to mention the loss of communication with his children. The children are assimilating into the American culture; therefore, they are losing their Spanish and with time the parents and the children are not going to be able to understand one another:

De que me sirve el dinero,	What is this money for,
si estoy como prisionero,	if I live like a prisoner,
dentro de esta gran nación?	in this great nation?
Cuando me acuerdo hasta lloro,	Sometimes I think about it until I cry,
aunque la jaula sea de oro,	and about the cage of gold,

no deja de ser prisión.

I don't forget that it is a prison.

Moreover, he realizes that his economic success is a result of unhappiness. It does not matter if the cage is made of gold; a cage is still a cage. We as humans use cages to trap animals so we can have control over them. The character in the song is trapped in the so-called American Dream. He has been trapped in the U.S. society, which we know to be a society controlled by the government. To go more in-depth, America is the cage, and we humans are trapped inside of it—especially the undocumented community. I am undocumented and I did not know how that affected me until I grew older. Like Wald mentions, at first you do not feel it, then when they start asking you for your driver's license, social security, and other documents that were not available to immigrants during the 1980s is when it hits you (158).

De mi trabajo a mi casa,	From my work to my house,
no se lo que me pasa.	I don't know what will
	happen.
Que aunque soy hombre de hogar,	So now I'm a man of the
	house.
casi no salgo a la calle,	I rarely go out into the street,
pues tengo miedo que me hallen	but I'm afraid that they will
	catch me,
y me pueden deportar.	and they could deport me.

The ending of the song focuses more on "the psychological impact of building a life in a foreign country" (Ragland, 175). Being undocumented means that one day you can be walking down the street, and out of nowhere the law can send you back where you came from. Even if he/she has been here for 20 years, if they have no legal papers, then it makes him/her illegal. This is a situation of feeling insecure in a strange land, where society does not accept you. More than anything, the main character in the song likes to be home, yet he still feels uncomfortable. Also, he cannot spend a lot of time in the street because of the fear of being deported. More importantly, the song serves as the voice

of the indocumentado, making a social and political statement about the unfair policies that limit the opportunities of the indocumentado in the United States.

Los Tigres: Traidor (Traitor)

Another issue among the Mexican community in the U.S. is that sometimes they are in between two cultures. Mexican Americans have a hard time because Americans do not accept them as being fully American. Additionally, the Mexicans do not accept them as fully Mexicans. When they decide to maintain both of their cultures, it is easy to judge, and many see them as traitors. In 1997, in the album, *Jefe de Jefes*, the song "Mis Dos Patrias expresses the dilemma of someone who is Mexican but also sees the United States as their new home:

Para quien dice que yo soy un malinchista	For who says I am a malinchista
y que traiciono a mi bandera	and that I betray my flag
y mi nación	and my nation
para que rompa con mi canto	to break with my singing
las fronteras	the borders
les voy abrir de par en par	I'll open them wide
mi corazón	my heart
deje las tumbas de mis padres	I left the tombs of my parents
mis abuelos	my grandparents
llegue llorando a tierra	arrive crying to earth
de anglosajón	of the Anglo-Saxon

First, the song starts with a voice-over of the Pledge of Allegiance. Then, it switches to a direct tone, talking to the audience who calls the song's protagonist a "malinchista." Malinchista translates into "traitor" because that is what everyone called La Malinche after she translated for Cortes during the Spanish Colonialism. The protagonist states that he is not a traitor, and he shares the feelings he has for both nations—México and the United States—in order for people to understand him. He claims that he made the sacrifice to leave his ancestors and parents behind to give his children a better life; therefore, he is not a traitor, but someone who is

searching for a better future. He says his sons are born here, and that he is fighting for his rights to not get stamped out:

Pero que importa	But what if
si soy nuevo ciudadano	I'm a new citizen
sigo siendo mexicano como	I am still as Mexican as
el pulque y el nopal	the pulque and the cactus
y mis hermanos centro	and my brothers Central
y sudamericanos, caribeños	and South American,
	Caribbean
o cubanos traen la sangre	or Cubans carry the tropical
tropical para que respeten los	blood to respect the
derechos de mi raza	rights of my race
caben do patrias	two homelands
en el mismo corazón	fit in the same heart

Furthermore, the lyrics bring attention to the idea that it does not matter if someone becomes a U.S. citizen; he/she will still have Mexican blood. In fact, he will still be as Mexican as the pulque and cactus. The same goes for South Americans, Caribbeans, and Cubans, as they still have tropical blood in them. Lastly, "Mis Dos Patrias" "expresses concern about maintaining Mexicanidad while living in a country that views his community as second-class and uneducated" (Ragland, 185). To add to this, the song describes a person who has found their sense of belonging. Now the problem is that he is viewed as a traitor. To sum it up, the song sends a powerful statement to both cultures and educates them that it is possible for two nations to be part of the same heart.

Los Tigres: Resistance of Acculturation, Maintaining Identity

"In 1996, Congress passed the Illegal Immigration Reform and Immigrant Responsibility Act to further aid Reno's plan by requiring the border patrol to hire and deploy one thousand new agents and three hundred new support personnel every year from 1997 to 2001" (Ragland, 58). In 1997, "El Mojado Acaudalado" (The Wealthy Wetback) celebrates the story of the few Mexicans who are able to accomplish what they came here to do:

Me estas esperando México lindo	Are you still waiting
	for me, Mexico
Por eso mismo me voy a ir	that is why I am going
	to go
Soy el mojado acaudalado	I'm the wealthy
	wetback
Pero en mi tierra, quiero morir	But in my land, I want
	to die.

This song states that the mojado has collected enough money. Now, the mojado can say goodbye to the United States and return to his country of birth to enjoy the rest of his life. Ragland says that this is a reality that only some immigrants can enjoy; "a sense of loyalty to the mojado's regional and cultural heritage allows him to resist acculturation and maintain a distinct identity while still living in the United States" (185). At the end, the wealthy wetback wants to go back, because México is waiting for him, and he wants to go there to die.

Adiós, Adiós California	Goodbye, goodbye California
Tejas, Chicago Illinois	Texas, Chicago, Illinois
me llevare su recuerdo	I will take your memory
porque a mi tierra me voy	Because I'm leaving
pues aunque tengo dinero	Well although I have money
no soy feliz donde estoy	I'm not happy where I am
Adiós, Adiós Colorado Nevada y Oregon adiós les dice el mojado	Goodbye, goodbye Colorado Nevada and Oregon goodbye tells them the wetback
que se empapó de sudor	who got drenched in sweat
en los campos de Arizona	in the fields of Arizona
fabricas de Nueva York	New York factories

During the 1990s, the Mexicanos were becoming a national rather than a regional minority: in New York, with 83% residing in the

Southwest, and in California with 6,118,996, where 7.7 million represented 25.8% of the total population (Gonzales, 229). Outside the Southwest, the largest number of Mexicans was found in the Midwest. Over 1.5 million resided in Chicago and Detroit. In the Los Angeles metropolitan area there were 4,779,000, 32.9% of the total population in 1992 (229). The lyrics of the song inform us of the journey and the work of the Mexicanos across different cities of the United States. "By the 1990s, Mexicans could be found picking citrus fruit in Florida, harvesting tobacco in North Carolina, collecting mushrooms in Pennsylvania, tending poultry in Maine, packing orchards crops in Washington, cleaning fish in Alaska, and working in slaughterhouses in Iowa" (Gonzales, 224). "El Mojado Acaudalado" delivers a message to the U.S. by letting the country know how grateful he is for its opportunities. The wealthy wetback came to make money, and now that he has made it, it is time to go back. Thus, "El Mojado Acaudalado" is never going to forget the United States of America.

In the beginning of the 2000s, Los Tigres's song "De Paisano a Paisano" (From Countryman to Countryman) was awarded the Latin Grammy Award for Best Regional Mexican Song. The album, *La Riena del Sur*, was also awarded a Latin Grammy Award for Best Norteño Album. In 2003, 73 immigrants who crossed the border illegally were found locked in a trailer truck, dehydrated and starving. Nineteen of them were found dead. Los Tigres sang a popular corrido, "José Peréz León," which communicates the story of the five-year-old who perished and was the son of a dead victim (Ragland, 181). Therefore, "De Paisano a Paisano" is a statement of solidarity. The song chorus reads:

De paisano a paisano	From countryman to
	countryman
del hermano, al hermano	from brother to brother
por querer trabajar	because of our desire to work
nos han hecho la guerra,	they have waged war on us,
patrullando fronteras,	by patrolling the borders,
no nos pueden domar.	but they cannot tame us.

The lyrics of the song convey that the only reason that many immigrants died at the border is because of the people who decided to patrol it. In other words, for many Mexicans who cross the border, many times it is because they have no choice. However, the border is a war zone where many immigrants die unfairly. In the song, Jorge tells us directly in a voice-over that if he could, with his singing, he would destroy the borders of the world to live under one nation. Jorge also talks about debt peonage: "who collects the harvest, who works cleaning hotels and restaurants, and who is killed working in construction. While the boss scolds the knitting spider web in its luxurious mansion. Many times, we are not paid, so the sore leaves as it leaves poisoned, they call immigration." Finally, this speaks of the many Mexicans who come to this country in search of a better life for their children. Yet, when they arrive at the country of the Stars and Stripes, the Mexican immigrants are trapped in low-working jobs, where the bosses have total control over them.

Conclusion

Los Tigres del Norte's norteña music expresses their opinions on Mexican politics, government corruption, U.S. immigration laws and legislation, and oppression of the undocumented worker, which is the focus of this discussion. The songs that were analyzed focused more on the mojados (wetbacks), indocumentado (undocumented), and being in between two cultures. Songs like "La Jaula de Oro" are what give Los Tigres, "Los Idolos del Pueblo" title. Los Tigres gives a voice to the voiceless. Los Tigres del Norte do not glorify themselves; they glorify their audience. In many of their concerts, their fans write the name of their favorite song on a small piece of paper, then they throw the piece of paper to the stage and Los Tigres pick it up. The song that is written on the paper they pick up is the song they play. Surprisingly, the songs of Los Tigres del Norte tend to focus on the issues that arise, or are happening at that moment. They adapt their songs to whatever is going on. Moreover, in one of their concerts, they were asked, "Why is it that you do not sing about us?" It was people from the LGBTQ+ community who approached Los Tigres so that they could sing about them. In 2014, in their album, Realidades, Los Tigres included the song "Era Diferente" (She Was Different). "Era Diferente" tells the story of a lesbian woman who is very

beautiful, yet men tend to not understand why is it that she is not interested in dating them. Another song "La Bala" focuses on how today's children might be involved in cartels at a young age. The song also questions how the parents always give children what they want if it makes them happy. The overall message of the song is to encourage parents to turn in their sons to the authorities if they are delinquents.

As we now know, Los Tigres themselves were illegal immigrants before, but their musical talent made them famous. Los Tigres frequently sing about the border and undocumented individuals because they were once in our shoes. Therefore, they use their music to share their experiences with us, which are similar to ours. Like in Chicana/o Studies, its literature unites; it helps us to discover ourselves, and we learn about our culture. Los Tigres are doing the same thing, however, they are educating us through the power of their music. Furthermore, their songs about mojados are the songs that the Mexican immigrants listen to the most. Those songs reached a broader audience because it was not only Mexican immigrants in California who listened to them, but also immigrants throughout the United States. Some of their songs that need further analysis for future discussions are "Tres Veces Mojados" (Three Times Wetback), "America," and "Los Hijos de Hernandez" (The Sons of Hernandez). Also, songs about the corruption, violence, and issues of México are worth analyzing.

I will end this discussion with the song I began with: "Somos Mas Americanos." Here are the first lines of the song:

Ya me gritaron mil veces	A thousand times they have
	shouted at me
que me regrese a mi tierra,	to go back to my land
porque aquí no quepo yo	because I don't belong here
quiero recordarle al gringo:	Let me remind the gringo:
Yo no cruzé la frontera	I didn't cross the border
La frontera me cruzó	the border crossed me

The lyrics go back to 1848, when the United States took away the Mexican land and most Mexicans became part of the United States

because of the Anglo conquest. The uprooted Mexican in the song was torn from his homeland, "like a nail torn from its finger." (Vigil, 211-212). For this reason, we do not need to remind the gringo that we did cross the border; instead, we need to tell him that we are in our land. The song states that America was born free, but certain men divided it. In other words, the line highlights the error of the people who invaded it, and if they created the border, then it is for us to jump over it. The Mexican people became foreigners in their own land. Yet, we do not come here for war, we come here to work. The next lines read:

Y si no miente la historia,	If history doesn't lie,
aquí se sentó en la gloria	the powerful nation
la ponderosa nación	was settled here in glory
Y si a los siglos nos vamos:	if we go by the centuries:
somos mas americanos,	we are more American,
somos mas americanos	we are more American
que el hijo de anglo-sajón.	than any son of the Anglo-
	Saxon

The lyrics express that Mexicans are Indians of two continents mixed with the Spaniards. For this reason, if we look back to the past centuries of people living in the American continent, we are more American than the Anglo-Saxon. However, in 1848, the U.S. invaded Mexico and they purchased the water of the Rio Bravo without money. They took Texas, New Mexico, Arizona, Colorado, California, Nevada, Utah, and Wyoming. Maybe if this event had never occurred, the U.S. would not have had many undocumented people. Since those states tie back to our history even before the "Americans," it explains why many Mexicans in the U.S. do not assimilate. Finally, the song ends with "Aunque le duela al vecino, somos mas americanos que todititos los gringos" (Though, it pains the neighbor; we are more American than every one of the gringos).

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