



Butler Journal of Undergraduate Research

Volume 6

2020

Volume 6 Full Text

BJUR Staff

Follow this and additional works at: <https://digitalcommons.butler.edu/bjur>



Part of the [Arts and Humanities Commons](#), [Business Commons](#), [Education Commons](#), [Life Sciences Commons](#), [Medicine and Health Sciences Commons](#), [Physical Sciences and Mathematics Commons](#), and the [Social and Behavioral Sciences Commons](#)

Recommended Citation

Staff, BJUR (2020) "Volume 6 Full Text," Butler Journal of Undergraduate Research: Vol. 6, Article 12.

This Article is brought to you for free and open access by the Undergraduate Scholarship at Digital Commons @ Butler University. It has been accepted for inclusion in Butler Journal of Undergraduate Research by an authorized editor of Digital Commons @ Butler University. For more information, please contact digitalscholarship@butler.edu.



BJUR

BUTLER JOURNAL *of*
UNDERGRADUATE RESEARCH

VOLUME 6 | MAY 2020

digitalcommons.butler.edu/bjur

bjur@butler.edu

BUTLER JOURNAL OF UNDERGRADUATE RESEARCH

VOLUME 6 MAY 2020

- What Do You Want to Be When You Grow Up? Cognitive Flexibility Influences Career Decision Making and Related Anxiety 1
Emily M. Flandermeyer, Keegan G. Sawin, Butler University
Mentor: Tara Lineweaver
- Comparison of Patient Outcomes in a Pharmacist-Led Parenteral Antimicrobial Therapy Program 17
Zachary W. Howe, Butler University
Lindsay Saum, Butler University
Jennifer McCann, St. Vincent Indianapolis
Mentor: Lindsay Saum
- Border Security and Immigration Policy: The Fight against Terrorism 26
Caroline Klenck, Butler University
Mentor: Kenneth Colburn, Jr.
- The Motivations and Perceived Benefits of Student Participation in Dance Marathon 66
Emily J. Nettesheim, Butler University
Mentor: Chad Knoderer
- A Matter of Perspective: Reportage Style in *District 9* (2009) 85
M. Mert Örsler, Bilkent University
Mentor: Colleen Kennedy-Karpat

Drowning in Depression: A Reading of William Cowper's "The Castaway"	98
Katrina B. Skalko, Middle Georgia State University Mentor: Laura Thomason	
Parent Interaction between an Infant with a Cochlear Implant and Additional Disabilities	108
Lillian J. Southern, Butler University Mentor: Tonya Bergeson-Dana	
Cyber Jihadism: An Analysis on How the Cyber Sphere Has Altered Islamic Terrorism	128
Simon Spangenberg, University of New Mexico Mentor: Marie Vasek	
The Butler-Tarkington Community Member Views on the Perceived Gentrification	147
Julio C. Trujillo, Jr., Ethan Daniels, Butler University Mentor: Kenneth Colburn, Jr.	
Women's Empowerment or Exploitation of Women? Examining the Implications of Economic Empowerment Programming	178
Billie White, Middlebury College Mentor: Karima Borni	

INAUGURAL EDITOR

Kenneth D. Colburn, Jr.
Department of Sociology and
Criminology
Butler University
4600 Sunset Avenue
Indianapolis, IN 46208
bjur@butler.edu

CO-EDITOR

Tara T. Lineweaver
Department of Psychology
Butler University
bjur@butler.edu

STUDENT ASSISTANT EDITORS

Emily Flandermeyer
Hannah Bolander
Department of Psychology
Butler University

DESIGN EDITOR

Jennifer Coronado
Butler University Libraries
Butler University
jraye@butler.edu

COPY EDITOR

Stephanie R.S. Stringham

EDITORIAL ADVISORY BOARD

Vivian Deno
History, Butler University

Lee Garver
English, Butler University

Kathie Kelton
Music, Butler University

Nat Hauck
Biology, Butler University

Chad Knoderer
Pharmacy, Butler University

Robert Padgett
Psychology, Butler University

Mindy Welch
Education, Butler University

Anne Wilson
Chemistry, Butler University

Hongjiang Xu
Business, Butler University

VOLUME 6 REVIEWERS

Dacia Charlesworth
CHASE, Butler University

Joseph Colavito
English, Butler University

Kendra Damer
Pharmacy Practice, Butler University

Lisa Farley
Human Movement & Health Sciences,
Butler University

Lee Garver
English, Butler University

Ankur Gupta
Computer Science, Butler University

Derek Houston

Ashley Hutson
Sociology, Butler University

Andrew Levy
English, Butler University

Joel Martin
Psychology, Butler University

James McGrath
Religion, Butler University

Katherine Novak
Sociology, Butler University

Su-Mei Ooi
Political Science, Butler University

Ann Savage
Communication, Butler University

Sholeh Shahrokhi
Anthropology, Butler University

Levi Tenen
Faculty Teaching Fellow, Religion,
Butler University

Robin Turner
Political Science, Butler University

Bill Walsh
English, Butler University

VOLUME 6 BUTLER UNIVERSITY SPONSORS

Neuroscience	Physics & Astronomy	College of Communication
Psychology	Creative Media & Journalism	Pharmacy Practice
English	College of Education	Pharmaceutical Sciences
Gender, Women & Sexuality Studies	Sociology and Criminology	Physician Assistant
International Studies	Jordan College of the Arts	Health Sciences
Department of Biological Science	Office of the Provost	History & Anthropology
Science, Technology & Environmental Studies	Peace and Conflict Studies	Center for High Achievement & Scholarly Engagement
Philosophy, Religion, and Classics	Political Science	Liberal Arts & Sciences
Strategic Communication	Critical Communication & Media Studies	Butler University Libraries

MISSION AND EDITORIAL POLICY

The mission of the *Butler Journal of Undergraduate Research (BJUR)* is to advance Butler's commitment to undergraduate research by seeking to publish original, high quality empirical research undertaken by undergraduates from any university. The journal is national in scope, multidisciplinary, and seeks to publish the best empirical and scholarly research available from undergraduate students anywhere. Submission of original, scholarly research articles is open to undergraduates from any accredited college and university.

The publication of the Butler Journal of Undergraduate Research is designed to build upon and strengthen Butler's commitment to quality undergraduate research by providing an outlet for the publication of outstanding undergraduate scholarship. BJUR recognizes and supports diverse disciplines, perspectives and methods across the social sciences, natural and life sciences, the arts and humanities. The Journal publishes papers that represent original research undertaken by a student or students during their undergraduate career.

BJUR is committed to intellectual integrity, rigorous standards of scholarship, and rational and civil discourse. It seeks to foster open and critical inquiry that privileges no particular disciplinary standpoint while operating within the limits of a standard of scientific, scholarly and empirical discourse committed to the pursuit of knowledge and truth. While every effort is made to publish issues that represent a fair balance of scholarship across the entire spectrum of undergraduate studies, the Journal's first priority is always to publish the best undergraduate research available at any given time regardless of disciplinary representation.

POWERED BY



© 2020 Butler Journal of Undergraduate Research

digitalcommons.butler.edu/bjur

WHAT DO YOU WANT TO BE WHEN YOU GROW UP? COGNITIVE FLEXIBILITY INFLUENCES CAREER DECISION- MAKING AND RELATED ANXIETY

EMILY M. FLANDERMEYER, KEEGAN G. SAWIN, BUTLER UNIVERSITY
MENTOR: TARA LINEWEAVER

Abstract

Career indecision is a stage most individuals pass through during their lifetimes, but it is often accompanied by anxiety. Although anxiety can have a positive influence on decision-making by focusing attention and cognitive resources, excess anxiety can disrupt the career decision-making process. Existing literature links anxiety to cognitive flexibility, an individual's ability to efficiently switch between thoughts and ideas and to adapt to evolving situations, with young adults higher in cognitive flexibility typically experiencing less anxiety than their less-flexible peers. No studies to date have examined cognitive flexibility as it relates to career indecision or to career-indecision-related anxiety, however. This study examines the relationships between cognitive flexibility, career indecision, and anxiety in undergraduate students; 156 undergraduate students (72% female, 91% Caucasian, 63% juniors and seniors) completed an online Qualtrics survey assessing career indecision, career anxiety, cognitive flexibility, and general demographic information including academic trajectory, career confidence, and personal characteristics. The data support previously documented relationships between career indecision and anxiety and demonstrated that cognitive flexibility significantly relates to both of these factors. Our results suggest a model in which cognitive flexibility directly influences career decision-making, which in turn dictates levels of career-indecision-related anxiety; thus, individuals who are low in cognitive flexibility and high in career indecision may be excellent candidates for interventions designed to increase cognitive flexibility to promote career decision-making and to reduce career-indecision-related anxiety.

Career decisions are some of the most complex choices individuals must make, as the individual must consider a variety of factors—personal abilities, life and career goals, work preferences, and personal expectations—when selecting a

career path (Di Fabio, Palazzeschi, Asulin-Peretz, & Gati, 2013). The sheer number of factors to consider is often overwhelming. Although career indecision appears to be a normal stage that most individuals pass through during their lifetimes, decision-making confidence, perceived breadth of career options, and anxiety levels surrounding the decision can all influence the length and severity of the period of career indecision (Campagna & Curtis, 2007; Creed, Patton, & Prideaux, 2006; Osipow, 1999).

Even though career indecision is a common phenomenon, it is often accompanied by anxiety. Anxiety is a relatively frequent emotion that is influential in driving judgments and decisions, including those about careers (Campagna & Curtis, 2007; Fuqua, Newman, & Seaworth, 1988). Although anxiety can have a positive influence on judgment and decision-making by focusing attention and cognitive resources, excess anxiety can impede the career decision-making process (Campagna & Curtis, 2007; Fuqua et al., 1988). A variety of factors can drive the anxiety associated with career indecision, including a lack of information about self and careers, uncertainty about the appropriateness and degree of career fit, having multiple interests, and the existence of barriers associated with specific careers. Fuqua, Newman, and Seaworth (1988) investigated the relationships between these factors and anxiety in undergraduate students at a Midwestern university. They found that a lack of information about the self and about careers shared the strongest relationship with anxiety, but anxiety also significantly correlated with uncertainty of fit and the presence of barriers to intended career choice. Although these results suggest that anxiety is highly related to career indecision, they do not address the direct relationship between these two factors.

In an effort to better understand the links between career indecision and anxiety, several studies have investigated the specific roles of state anxiety and trait anxiety in career indecision and career certainty (Campagna & Curtis, 2007; Fuqua et al., 1988; Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983). State anxiety consists of anxious feelings surrounding specific events or situations, whereas trait anxiety represents an individual's natural tendency to become anxious regardless of situational factors. To date, it is unclear whether state anxiety, trait anxiety, or a combination of the two best accounts for the anxiety associated with career indecision (Campagna & Curtis, 2007; Fuqua et al., 1988; Spielberger et al., 1983). Campagna and Curtis (2007) found that both state and trait anxiety positively correlated with career indecision, but state anxiety was the better predictor. In addition, only state anxiety was negatively correlated with career certainty, suggesting that increased career uncertainty may lead to higher levels of state

anxiety, rather than trait anxiety leading to career uncertainty. While it is still unclear exactly which type of anxiety is responsible for the negative feelings associated with career indecision and whether anxiety precedes or results from difficulties in selecting a career path, these findings suggest that state anxiety resulting from the stressful nature of selecting a career may be more influential in the experience of career-indecision-related anxiety than an individual's natural tendency to become anxious.

A variable that may affect the amount of anxiety an individual will experience is cognitive flexibility. Cognitive flexibility is the ability to efficiently switch between thoughts and ideas, to consider multiple perspectives or approaches simultaneously, or to easily adapt to specific or evolving situations (Kercood, Lineweaver, Frank, & Fromm, 2017; Scott, 1962). Though past research has not explicitly addressed the relationship between cognitive flexibility and the anxiety associated with career decision-making, studies outside the realm of career decision-making have documented links between cognitive flexibility and anxiety more generally. For example, higher anxiety levels are correlated with lower levels of cognitive flexibility in individuals with generalized anxiety disorder (Arlt, Yiu, Eneva, Dryman, Heimberg, & Chen, 2016) and eating disorders (Simon & Verboon, 2016). Given this relationship with anxiety in non-career-related settings, it is possible that cognitive flexibility may also be related to career-indecision-related anxiety. If the pattern is similar to that with other types of anxiety, individuals who are higher in cognitive flexibility may experience lower levels of career-related anxiety.

Cognitive flexibility may also relate to career indecision in undergraduate students, although this is a much less extensively studied area than is cognitive flexibility's relationship with anxiety. In a study of professional identity in first-year health- and social care students, students who were higher in cognitive flexibility reported a stronger professional identity (the extent to which they felt they belonged to a certain profession and identified with individuals in that line of work) than did students lower in cognitive flexibility (Adams, Hean, Sturgis, & Clark, 2006). Additionally, a different study asked undergraduate students with and without ADHD to rate their subjective cognitive flexibility, as part of a larger investigation of cognitive flexibility's impact on academic achievement and career choice. Interestingly, the relationship between cognitive flexibility and career confidence differed in these two populations. Students with ADHD who were higher in subjective cognitive flexibility showed less career confidence than their less-cognitively flexible peers, whereas non-ADHD students with higher subjective

cognitive flexibility showed increased confidence in their career choices than did those lower in cognitive flexibility (Kercood et al., 2017). Together, these two studies raise the possibility that in typical undergraduate populations, the ability to consider multiple options may influence decision-making about future career paths, although career indecision was not explicitly addressed in either investigation.

The current descriptive study fills two gaps in the literature by exploring the relationships between cognitive flexibility and career-indecision-related anxiety as well as between cognitive flexibility and career indecision. Although trait anxiety may contribute to career indecision, given the prior literature's indication that state anxiety relates more strongly to career certainty and indecision, the current study focuses only on career-indecision-related anxiety (a form of state anxiety). Given what is known about cognitive flexibility's relationships with anxiety and with professional identity and career confidence, we expected students with greater cognitive flexibility to experience less anxiety (hypothesis 1) and less indecision (hypothesis 2) about their future careers.

Although the previous literature does not specifically address the relationships between cognitive flexibility, anxiety, and career indecision, the relationships that exist between these variables independently (cognitive flexibility and anxiety; cognitive flexibility and professional identity/career confidence) suggest a promising area in which to expand the existing literature. Because of the strong relationships between cognitive flexibility and anxiety outside of the realm of career decision-making, our third hypothesis is that cognitive flexibility may influence anxiety differently in people who are undecided about their future careers than in those who are decided about their career paths. Cognitive flexibility may play little role in the anxiety experienced by individuals who are fairly decided in their careers, as their anxiety levels are likely to be minimal. In contrast, individuals who are undecided tend to experience much higher levels of anxiety, and in this group, those who are lower in cognitive flexibility may experience higher levels of anxiety, whereas those who are higher in cognitive flexibility may not suffer from anxiety to the same extent.

Given the importance of these three factors, a study integrating all three concepts has the potential to enhance our understanding of the complex relationships they may share and of their influence on the career decision-making process as a whole. Understanding factors that influence the anxiety associated with career decision-making could contribute to improving the experiences of individuals who are in the process of choosing career paths. The results of the current study could also point to interventions that target the negative feelings

associated with indecision, allowing individuals to redirect their cognitive resources back toward career-related decision-making. Finally, by demonstrating who is most vulnerable to career-indecision-related anxiety, the current study could help to identify those most likely to benefit from these or other types of interventions.

Method

Participants

Participants included 156 undergraduate students (91% Caucasian) aged 18–23 ($M = 20.05$, $SD = 1.28$) from a variety of educational backgrounds. Age did not share a significant relationship with any of the three main outcome variables (all $ps > .247$). The sample included a greater proportion of juniors and seniors (63%) than of first- and second-year students (37%). Additionally, more women ($n = 113$, 72%) participated in the study than men ($n = 43$, 28%). Women and men did not differ in career indecision ($t(154) = .21$, $p = .831$) or cognitive flexibility ($t(154) = -1.08$, $p = .283$), but women scored significantly higher than men on the career anxiety measure, $t(154) = -2.29$, $p = .023$. To assure that gender did not influence the results of any of the primary analyses, we initially included it as a covariate. Covarying gender did not change any of the results. Therefore, for simplicity, the primary analyses do not include gender.

Materials

Each participant completed a 29-question online Qualtrics survey consisting of a series of questionnaires related to career indecision, anxiety, and cognitive flexibility. We adapted existing questionnaires assessing these three factors to fit the Qualtrics format.

Demographic Questionnaire

This questionnaire gathered participant demographics such as age, gender, year in school, and race. Additionally, it evaluated students' self-perceptions of the number of times they are asked about their career plans, their number of majors and/or minors, and their career confidence.

Career Anxiety Scale (Thai, 2014)

This 12-item scale assessed career-related anxiety using a 6-point Likert scale (1 = strongly disagree, 6 = strongly agree). Some example items included “Thinking about my future career is scary”; “I feel nervous about choosing a career”; and “I feel nervous when others ask me about my career plans.” Scores on this measure ranged from 12 to 72, with higher scores indicating more career-related anxiety.

My Vocational Situation (Holland, Daiger, & Power, 1980)

This questionnaire assessed individuals’ current perceptions of their potential career paths and provided an objective measure of career indecision. This study utilized only one of three subscales from the larger questionnaire: the vocational identity subscale, which consists of 18 true/false items that evaluate career indecision. Example items included: “If I had to make an occupational choice right now, I’m afraid I would make a bad choice”; “I am uncertain about which occupation I would enjoy”; and “I am uncertain about the occupations I could perform well.” Participants indicated whether each statement was more true or more false for them. Scores on the subscale ranged from 0 to 18, with higher scores indicating greater levels of career indecision.

Cognitive Flexibility Scale (Martin & Rubin, 1995)

This 12-item self-report questionnaire measured aspects of cognitive flexibility on a 6-point Likert-type scale (1 = strongly disagree, 6 = strongly agree). It assessed flexibility in interactions and communication style, willingness to adapt to changing circumstances, and self-efficacy about flexibility. Example items included “I can communicate an idea in many different ways”; “My behavior is a result of conscious decisions that I make”; and “I am willing to work at creative solutions to problems.” Scores on this measure ranged from 12 to 72, with higher scores indicating greater cognitive flexibility.

Procedure

This descriptive study involved an online Qualtrics survey constructed from the measures presented above. First, participants completed the Demographic Questionnaire, followed by the Career Anxiety Scale, the My Vocational Situation questionnaire, and the Cognitive Flexibility Scale. All participants completed these

questionnaires in a fixed order. The survey ran for a month-long period (September–October 2018) and was advertised via an online participant-management system posting, the Honors program listserv, and our personal connections. Students answered the survey questions at their leisure, averaging 12 minutes to complete the survey. Upon full completion of the survey, students received either extra credit in a psychology-related course or a link to a \$5 Amazon gift card.

Results

Relationships among Key Variables

We ran standard correlation analyses in IBM SPSS Statistics to explore the relationships between the primary study variables. Not surprisingly, and in accordance with the prior literature, students who were highly undecided in relation to their future careers reported more anxiety than students with less career indecision, $r = .809, p < .001$. Consistent with our first hypothesis, students who were higher in cognitive flexibility experienced less career-indecision-related anxiety than did their less-cognitively flexible peers, $r = -.199, p = .013$. Students who were more cognitively flexible also experienced less career indecision ($r = -.280, p < .001$), supporting our second hypothesis and suggesting that individuals who are better able to consider multiple options are more decisive in their career planning.

In terms of career confidence, students experiencing more career indecision reported that they were less confident in their proposed career paths than did students who were more decided, $r = -.596, p < .001$. Individuals with greater career confidence also reported less anxiety about their future career plans, $r = -.595, p < .001$. Finally, career confidence, unlike career indecision, did not share a significant relationship with cognitive flexibility, $r = .103, p = .200$.

When we examined relationships among other variables, we found that students' perceptions of the number of times others have asked them about their future career plans were influenced by their career indecision, with students higher in indecision reporting that they were asked more often about their careers than were students lower in indecision, $r = .206, p = .010$. Interestingly, career-indecision-related anxiety did not share a significant relationship with students' perceptions of the number of times they were asked about their plans, $r = .097, p = .227$.

Mediating Effects of Cognitive Flexibility

To test our third hypothesis and the potential differential influence of cognitive flexibility on the career-indecision-related anxiety of career-decided versus career-undecided students, we first ran a series of regression analyses to test the potential mediating effect of cognitive flexibility using the statistical approach recommended by Baron and Kenny (1986). In partial support of the hypothesized model (Figure 1a), career indecision significantly predicted career-indecision-related anxiety ($R^2 = .654$, $F(1,154) = 290.92$, $p < .001$), and career indecision significantly predicted cognitive flexibility, $R^2 = .078$, $F(1,154) = 13.08$, $p < .001$. When both career indecision and cognitive flexibility were included as predictors of career-indecision-related anxiety, however, instead of cognitive flexibility remaining significant and indecision being rendered insignificant as hypothesized, career indecision significantly predicted anxiety ($t(153) = 16.51$, $p < .001$) while cognitive flexibility did not, $t(153) = .59$, $p = .555$. Cognitive flexibility thus appears to share only an indirect relationship with career-indecision-related anxiety, specifically through its relationship with career indecision.



a.



b.

Figure 1. Two potential models explaining the relationships between cognitive flexibility, career indecision, and career-indecision-related anxiety: (a) hypothesized model and (b) data-supported model.

To examine the possibility that the relationship between cognitive flexibility and career indecision is nonlinear, we examined a scatterplot of these two variables. Because the scatterplot suggested a possible curvilinear relationship, we divided participants into three groups based on their cognitive flexibility: low ($n = 48$), medium ($n = 54$), and high ($n = 54$) and then used a median split to create low-indecision ($n = 85$) and high-indecision ($n = 71$) groups. We conducted a 2 (Career Indecision: Low versus High) x 3 (Cognitive Flexibility: Low, Medium, High) ANOVA, with career anxiety as the dependent variable. We expected that in the low-indecision group, career-indecision-related anxiety would not vary based on cognitive flexibility levels because the anxiety levels of these students would generally be low; however, we expected that cognitive flexibility would play a significant role in the more substantial anxiety levels experienced by those in the high-indecision group.

As shown in Figure 2, there was a significant main effect of career indecision ($F(1,150) = 94.112, p = .000$), but not of cognitive flexibility, $F(2,150) = 0.164, p = .849$. Contrary to our expectations, the interaction effect between cognitive flexibility and career indecision did not reach significance, $F(2,150) = .540, p = .584$. That is, cognitive flexibility did not differentially influence the career-indecision-related anxiety of students who were decided or undecided about their future career paths. These results further support the lack of mediation found in the regression analyses. Together, these findings suggest that the relationships between these three variables do not fit the hypothesized model (Figure 1a). Instead, career indecision seems to mediate the relationship between cognitive flexibility and anxiety, pointing to a new model of the relationships between these three factors (Figure 1b).

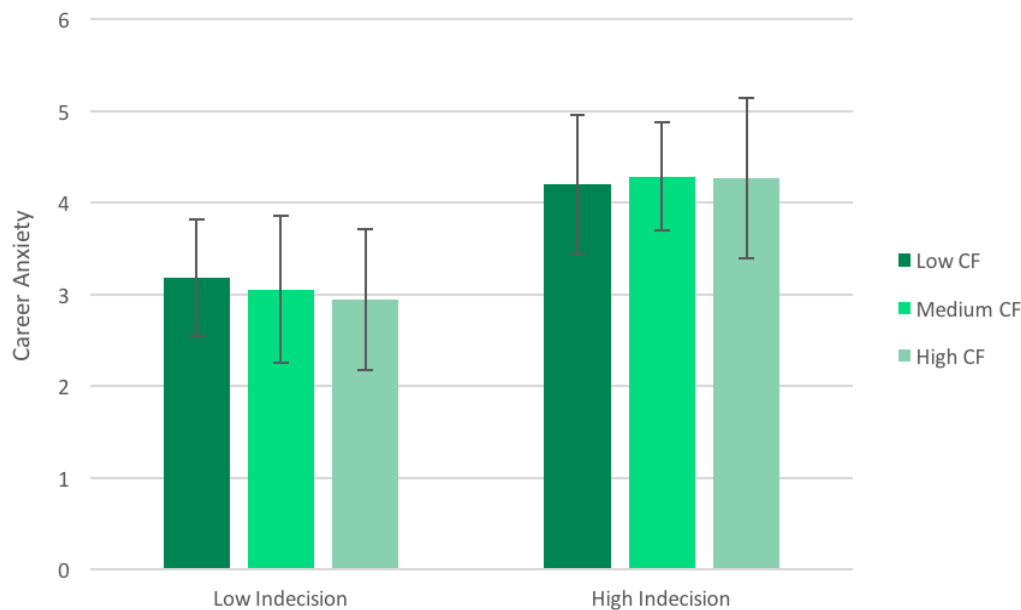


Figure 2. Differences in career anxiety of undergraduate students based on levels of career indecision (undecided vs. decided) and levels of cognitive flexibility (low CF, medium CF, high CF). The main effect of Career Indecision was significant ($p = .000$), while the main effect of Cognitive Flexibility ($p = .849$) and the interaction of Career Indecision x Cognitive Flexibility ($p = .584$) were not significant. Error bars represent 1 standard deviation.

Discussion

This study strongly supports the previously documented relationship between career indecision and anxiety but augments prior research through an exploration of cognitive flexibility in the context of career decision-making. The strong positive relationship between career indecision and career-indecision-related anxiety seen in this study is consistent with prior findings that suggest that individuals who are more undecided about their future careers experience more anxiety (Campagna & Curtis, 2007; Fuqua et al., 1988). More importantly, the current study expands on prior literature that has documented relationships between cognitive flexibility and anxiety disorders by showing that cognitive flexibility also predicts anxiety in a career-decision-making context. Consistent with our first hypothesis, individuals who were more cognitively flexible experienced less career-indecision-related anxiety. Additionally, in support of our second hypothesis, we found that individuals with higher cognitive flexibility reported less

career indecision, suggesting that those with the ability to consider more career options may be more decided in the careers they choose to pursue. This relationship is a novel finding given that no other studies have explicitly looked at these two variables as they pertain to career choice, but it supports existing research on cognitive flexibility and other career-related variables such as professional identity (Adams et al., 2006).

Despite cognitive flexibility's established relationships with both career indecision and career-indecision-related anxiety, our results do not support the anticipated mediating effect among these three variables. We hypothesized that cognitive flexibility would play a different role in students' anxiety levels based on the students' levels of career indecision. Specifically, we anticipated that cognitive flexibility would have a greater potential to influence anxiety in students experiencing more indecision than in their more-decided peers. This was not the case, however. Although cognitive flexibility did not mediate the relationship between career-indecision-related anxiety and career indecision, it did significantly relate to both variables, suggesting an alternative model of cognitive flexibility's role in the career-decision-making process. Instead of acting as a mediator, cognitive flexibility appears to act directly on career indecision and through career indecision to influence career-indecision-related anxiety.

This new model, depicted in Figure 1b, points to reducing indecision by increasing cognitive flexibility as a promising initial target for intervention. For example, career counselors or other advisors could promote a broader exploration of career options, giving students a wider variety of careers to consider and allowing them to feel more informed when making selections. With this approach, advisors inherently model and encourage cognitive flexibility. Additionally, advisors' mindful selection of language surrounding the career-decision-making process could help students develop more-flexible mind-sets. For example, framing a student's first job as an opportunity to explore an interest rather than as a final irreversible choice may establish the idea of a flexible career journey instead of a set career path. These proposed flexibility-based strategies should be simple to implement and have the potential to effectively assist students with their career decision-making and to reduce their elevated anxiety levels.

Interestingly, cognitive flexibility did not relate to career confidence. This finding is contrary to the results of Kercood et al. (2017), who found that higher levels of cognitive flexibility corresponded with higher levels of career confidence in undergraduate students. This finding was also surprising because cognitive flexibility seemed to influence career indecision but did not influence how

confident individuals were in their career choices. These opposing results suggest that career confidence and career decision-making may be independent constructs.

Despite this study's promising findings about cognitive flexibility and the career-decision-making process, its results should be interpreted within the context of its limitations. First, the participants of this study attend an expensive private university in the Midwest and may not be demographically representative of undergraduate students at other institutions. Most students at this university are Caucasian, and many come from upper-middle-class households with two working parents. Given these demographic characteristics, these students could experience different levels of pressure to have successful careers in the future than when compared to undergraduate students from lower-income households. For example, higher-income students may experience more pressure in their career-decision-making processes as they try to live up to familial expectations. Alternately, these students may feel less pressure because prior advantages and associated successes resulting from their higher socioeconomic status may lead them to assume this trend will continue in the future as they pursue careers.

Second, because of its online nature, this study contained only a subjective measure of cognitive flexibility, the Cognitive Flexibility Scale (Martin & Rubin, 1995). The verbiage of some of this scale's statements (e.g., "I can communicate an idea in many different ways") may have led students to self-report in a socially desirable way, as flexible communication, efficient problem solving, and diversity of thought are typically viewed favorably in academic settings. Future studies may want to utilize an objective neuropsychological measure of cognitive flexibility, such as the Wisconsin Card Sorting Test (Grant & Berg, 1948), to counteract possible biases due to social-desirability effects.

Third, all participants filled out the survey questionnaires in the same order, which may have resulted in order effects. The administration of the measures in a fixed order was purposeful, however. The Career Anxiety Scale preceded the My Vocational Situation questionnaire to get a baseline of career anxiety before participants were prompted to think about career indecision, which has been shown in prior literature to increase anxiety (Campagna & Curtis, 2007; Fuqua et al., 1988). Furthermore, because cognitive flexibility affects both anxiety (Arlt et al., 2016; Simon & Verboon, 2016) and indecision (Adams et al., 2006; Kercood et al., 2017), the Cognitive Flexibility Scale was administered after the assessments of anxiety and indecision to prevent any carryover effects on these other measures.

Fourth, this study focused on state anxiety surrounding the career-decision-making process (how an individual feels in a specific situation) rather than on

individuals' general trait anxiety (how someone feels a majority of the time). Prior literature has suggested that state anxiety is more influential in the process of selecting a career (Campagna & Curtis, 2007), but this does not mean that trait anxiety does not play a role in these relationships. Because we did not include a measure of trait anxiety, we could not examine this role in the context of the current study.

Lastly, because our study was cross-sectional in nature, we were able to capture only a snapshot of our variables at one point in time. This limited the complexity of the relationships we were able to examine. It is possible that career-indecision-related anxiety, cognitive flexibility, and career indecision share a cyclical rather than linear relationship. For example, the high anxiety levels that were associated with low cognitive flexibility and high career indecision in our study could in turn decrease students' cognitive flexibility and thus interfere with their career decision-making, further contributing to their career-indecision-related anxiety. Although we were unable to explore this possibility, future longitudinal studies could examine interactive relationships between these factors.

Despite these limitations, we found support for two of our three original hypotheses: higher levels of cognitive flexibility are associated with lower levels of both career-indecision-related anxiety and career indecision. Although cognitive flexibility did not mediate the relationship between these two variables, its effect on career indecision suggests it could serve as a mechanism to promote career decision-making, a promising new direction for the development of interventions aimed at reducing career anxiety in undergraduate students. In addition, the findings of this study could be used to help identify students who would most benefit from interventions—those who are undecided and those who are low in cognitive flexibility. Furthermore, the current study significantly contributes to the existing body of research by being one of the first to look directly at cognitive flexibility as it relates specifically to career decision-making and career-related anxiety. As such, this study provides valuable information that begins to elucidate the complex interplay among cognitive flexibility, indecision, and career anxiety, not only providing a foundation for new avenues of research but also identifying a potential mechanism that advisors and other higher education professionals can utilize to promote students' decision-making and reduce their career-related anxiety.

References

- Adams, K., Hean, S., Sturgis, P., & Clark, J. M. (2006). Investigating the factors influencing professional identity of first-year health and social care students. *Learning in Health and Social Care*, 5(2), 55–68.
- Arlt, J., Yiu, A., Eneva, K., Dryman, M. T., Heimberg, R. G., & Chen, E. Y. (2016). Contributions of cognitive inflexibility to eating disorder and anxiety symptoms. *Eating Behaviors*, 21, 30–32.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.
- Campagna, C. G., & Curtis, G. J. (2007). So worried I don't know what to be: Anxiety is associated with increased career indecision and reduced career certainty. *Australian Journal of Guidance & Counselling*, 17(1), 91–96.
- Creed, P., Patton, W., & Prideaux, L. (2006). Causal relationship between career indecision and career decision-making self-efficacy: A longitudinal cross-lagged analysis. *Journal of Career Development*, 33(1), 47–65.
- Di Fabio, A., Palazzeschi, L., Asulin-Peretz, L., & Gati, I. (2013). Career indecision versus indecisiveness: Associations with personality traits and emotional intelligence. *Journal of Career Assessment*, 21(1), 42–56.
- Fuqua, D. R., Newman, J. L., & Seaworth, T. B. (1988). Relation of state and trait anxiety to different components of career indecision. *Journal of Counseling Psychology*, 35(2), 154–158.
- Grant, D. A., & Berg, E. (1948). A behavioral analysis of degree of reinforcement and ease of shifting to new responses in a Weigl-type card-sorting problem. *Journal of Experimental Psychology*, 38(4), 404–411. Retrieved from <http://dx.doi.org/10.1037/h0059831>
- Holland, J. L., Daiger, D. C., & Power, P. G. (1980). *My vocational situation*. Retrieved from <http://saens.hi.is/sites/saens.hi.is/files/MyVocationalSituation.pdf>.
- Kercood, S., Lineaweaver, T. T., Frank, C. C., & Fromm, E. D. (2017). Cognitive flexibility and its relationship to academic achievement and career choice

of college students with and without attention disorders. *Journal of Postsecondary Education and Disability*, 30(4), 329–344.

Martin, M. M., & Rubin, R. B. (1995). A new measure of cognitive flexibility. *Psychological Reports*, 76, 623–626.

Osipow, S. H. (1999). Assessing career indecision. *Journal of Vocational Behavior*, 55, 147–154.

Scott, W. A. (1962). Cognitive complexity and cognitive flexibility. *Sociometry*, 405–414.

Simon, E., & Verboon, P. (2016). Psychological inflexibility and child anxiety. *Journal of Child and Family Studies*, 23, 3565–3573.

Spielberger, C. D., Gorsuch, R. L., Lushene, R., Vagg, P. R., & Jacobs, G. A. (1983). *Manual for the State-Trait Anxiety Inventory*. Palo Alto, CA: Consulting Psychologists Press.

Thai, M. (2014). *The development and validation of a scale of career anxiety*. Undergraduate Awards Library. Retrieved from <http://www.undergraduatelibrary.org/2014/psychology/development-and-validation-scale-career-anxiety>

COMPARISON OF PATIENT OUTCOMES IN A PHARMACIST-LED PARENTERAL ANTIMICROBIAL THERAPY PROGRAM

ZACHARY W. HOWE, BUTLER UNIVERSITY

LINDSAY SAUM, BUTLER UNIVERSITY

JENNIFER MCCANN, ST. VINCENT INDIANAPOLIS

MENTOR: LINDSAY SAUM

Background

Outpatient parenteral antimicrobial therapy (OPAT) is defined as the administration of parenteral antimicrobials in at least two doses given on different days and without a hospitalization between.¹ Rather than a patient being required to remain in a hospital solely to receive antimicrobial therapy after medical discharge, he or she can complete a portion of the therapy as an outpatient. The ability to discharge a patient on intravenous (IV) antimicrobial therapy has been shown to potentially reduce the high costs associated with chronic administration of antibiotics,² increase the patient's quality of life by granting improved flexibility and convenience, and reduce the likelihood that the patient will acquire a nosocomial infection.² As a result, OPAT has grown at a breakneck pace since its inception in the 1970s, and projections of its market share predict that it will soon reach the multibillion-dollar-a-year threshold.¹

Interprofessional collaboration and careful selection of patients designated to receive OPAT are critical to ensuring successful therapy. Beyond the clinical expertise offered by infectious diseases (ID) physicians, coordination of social support and third-party authorizations between case management and pharmacy contribute significantly to a patient's ability to receive appropriate therapy. In some cases, the provision of home-based OPAT services can prevent an otherwise medically unnecessary stay at a subacute rehabilitation facility to receive IV antimicrobials for patients without reliable transportation to an infusion center. Additionally, in patients for whom adequate monitoring and follow-up cannot be guaranteed, complications related to vascular access devices and adverse drug reactions can lead to significant harm.³ Both social and medical evaluations should therefore be integral in the process of identifying patients appropriate to receive OPAT.

Furthermore, input from pharmacists to assist in the appropriate selection of antimicrobials and of durations of therapies has the potential to stem the rising tide of resistant microorganisms. The interventions related to spectrum and duration can lead to vastly reduced rates of adverse effects due to unnecessary antimicrobial use and can also reduce the likelihood that the patient may encounter an infection caused by a resistant organism later in life.⁴ Additionally, it may reduce the rate of multidrug-resistant organisms, which is especially critical for patients who must be admitted but are also most at risk. Through appropriate recommendations related to the spectrum and duration of therapy, selection of resistant microorganisms can be minimized, which partially mitigates these risks.

In November 2016 at a community hospital, a dedicated pharmacist was hired to continue to build a formal OPAT program for all patients discharged on IV antimicrobials under the care of the ID physician group. Through a collaborative-practice agreement, the pharmacist's responsibilities upon consultation were to evaluate and create a plan with recommendations related to antimicrobial selection (including drug, dose, route, frequency, and duration) as well as monitoring parameters. The pharmacist also provided patient education and assistance to case managers involved with disposition planning. Upon patients' discharge from the hospital, the pharmacist continued weekly monitoring throughout the duration of therapy of all patients who received such consultative services during their inpatient stay. Because of the relatively new nature of this OPAT program and the number of "good catch" events—in which a potential medical error related to the therapy or monitoring was prevented—observed since the program's formal inception, this study sought to examine the impact of an OPAT program for those patients receiving OPAT at hospital discharge.

Methods

This was a retrospective observational cohort study examining patients with an order for an IV antibiotic following discharge from a community hospital within the period of December 1, 2016, to May 31, 2017. Patients who received OPAT consults during their index hospital stay were compared to those patients who did not receive consults in the same period. Only adult patients were included in this study. Patients residing in a nursing home or long-term care facility prior to admission and those also receiving oral antimicrobials were excluded from the analysis. The primary objective was the proportion of patients in each group readmitted within 30 days of discharge and OPAT initiation, which was stratified by the reason for readmission (ID process, adverse drug event, or unrelated reason).

Baseline demographic information collected included age, sex, weight, and length of stay prior to discharge. Type of infection, antimicrobial selection (including agents with antipseudomonal activity or requiring therapeutic drug monitoring), duration of treatment, and disposition at hospital discharge were also collected from the electronic medical record. As avoiding unnecessary short-term acute rehabilitation (SAR) stays in cases where therapy can be altered and coordinated with home healthcare is one potential benefit of OPAT, change in disposition from admission to discharge was also collected.

Statistical Analysis

The Fisher’s exact test and chi-square analyses were utilized as appropriate for nominal endpoints including the 30-day readmission rate, use of each antimicrobial class, and use of agents with a high risk for a *Clostridioides difficile* infection, such as ceftriaxone, or requiring therapeutic drug monitoring. The Wilcoxon rank-sum test was utilized to determine the significance of differences in length of stay and duration of therapy. Statistical Package for the Social Sciences (SPSS) software was utilized for these analyses. All other variables and baseline demographic information were described utilizing descriptive statistics.

Results

No statistically significant differences between groups were seen in terms of demographic information (Table 1).

	OPAT Consult (n = 95)	No OPAT Consult (n = 22)	p Value
Median Age (IQR)	61 (21)	63 (26)	0.503
Sex (%)			
M	42 (44)	6 (27)	0.146
F	53 (56)	16 (73)	
Median Weight (IQR)	91 kg (35 kg)	79 kg (41 kg)	0.085
Median Index LOS (IQR)	6 (5)	7 (8)	0.313

Table 1. Patient Demographics

No statistically significant difference between the readmission rates of the OPAT consult group and the non-consult group was observed; however, the rate for the former was less than half of the latter, numerically (14.73% vs. 31.82%, $p = 0.07$). Additionally, the proportion of patients requiring a change in disposition did not vary significantly between groups (Table 2), with 39 (41%) patients with a consult and 12 (55%) patients without a consult being discharged to a SAR center or extended-care facility (ECF; $p = 0.252$). Bacteremia associated with various sources of infection was the most common type of infection requiring IV therapy in both groups, constituting 35% of patients in the OPAT consult group and 59% of the patients without a consult. Differences in provider type and indication for therapy between groups were statistically significant ($p < 0.0001$; 3×10^{-12}). The median total days of therapy for patients with a consult was 24, in comparison to 25 in the non-consult group ($p = 0.095$).

	OPAT Consult (n = 95)	No OPAT Consult (n = 22)	p Value
Disposition Change	39 (41%)	12 (55%)	0.252
Indication for Therapy			3×10^{-12}
Empyema	7	2	
Osteomyelitis	11	2	
Bacteremia	33	13	
Intra-Abdominal Infection	10	3	
Skin and Soft Tissue Infection (SSTI)	25	0	
Other	9	2	
Primary Provider Type			0.000095
Pulmonary	5	7	
Cardiology	10	1	
Surgery	25	4	
Internal Medicine	52	8	
Oncology	3	2	
Median Days of Therapy (IQR)	24 (19)	25 (17)	0.095

Table 2. Disposition Change, Therapy Indication, and Provider Type, All Patients

The most significantly differing trends between groups were evident in prescribing practices. The usage of antipseudomonal coverage was significantly lower in the OPAT consult group (39.58% vs. 86.36%, $p = 0.00006$). Additionally, utilization of ceftriaxone, known for its potential to predispose patients to *C. difficile* infections, was also significantly lower in the OPAT consult group (9.47% vs. 45.45%, $p = 0.00004$). Differences in other key antibiotics that serve as stewardship targets were also seen with piperacillin-tazobactam, cefepime, and vancomycin (Table 3). Also of interest, patients without an OPAT consult who were discharged to a SAR center or ECF were significantly more likely to have been prescribed agents requiring therapeutic drug monitoring (100% vs. 59.56%, $p = 0.038$) and to have later required readmission (54.55% vs. 16.22%, $p = 0.001$).

Drug Choice	OPAT Consult (n = 95)	No OPAT Consult (n = 22)	p Value
Ampicillin	5	2	0.495
Ampicillin-Sulbactam	12	2	0.645
Piperacillin-Tazobactam	13	11	0.0001
Cefazolin	15	3	0.801
Ceftazidime	1	0	0.203
Ceftriaxone	9	10	0.00004
Cefuroxime	1	1	0.255
Cefepime	10	7	0.011
Meropenem	8	5	0.054
Ertapenem	4	1	0.944
Gentamicin	6	5	0.017
Tobramycin	0	4	0.0002
Vancomycin	39	19	0.0001
Linezolid	0	2	0.023
Daptomycin	1	0	0.213
Metronidazole	2	5	0.0002
Clindamycin	2	2	0.104
Fluconazole	2	2	0.104
Antipseudomonal Agents	37	19	0.00006

Table 3. Therapeutic Drug Choice, All Patients

Readmitted Subgroup

When examining readmitted patients as a subgroup, several differences between those receiving a consult and those without were seen (Table 4). Significant differences in the indications for therapy ($p = 0.009$) were seen in this population, with bacteremia and SSTIs as the most common infection types in the OPAT consult (71%) and non-consult (43%) groups, respectively. Additionally, a trend was seen showing that patients in this subgroup without a consult were more likely to have experienced a change in disposition (85.71% vs. 42.86%, $p = 0.061$).

	OPAT Consult (<i>n</i> = 14)	No OPAT Consult (<i>n</i> = 7)	<i>p</i> Value
Median Age (IQR)	61 (16)	64 (26)	0.711
Sex			0.525
Male	8	5	
Female	6	2	
Indication for Therapy			0.009
Osteomyelitis	2	1	
Bacteremia	3	5	
Intra-Abdominal Infection	2	1	
Skin and Soft Tissue Infection (SSTI)	6	0	
Other	1	0	
Median Index Length of Stay in Days (IQR)	6 (2)	7 (3)	0.352
Median Days to Readmission (IQR)	12 (14)	9 (6)	0.368
Disposition at Discharge			0.061
Home	8	1	
ECF or SAR	6	6	
Disposition Change	6 (43%)	6 (86%)	0.061
Median Total Days of Therapy (IQR)	28 (24)	28 (27)	0.190

Reason for Readmission			
ID Process			0.216
Adverse Drug Event	2	3	
Unrelated Process	3	1	
	9	3	

Table 4. Readmitted Patients

Discussion

No statistical significance in terms of the primary objective (30-day readmission rate) was seen in the study; however, the more than twofold difference in readmission rate can certainly be seen as clinically significant. The readmission rate of 14.74% was also similar to the 21.5% readmission rate reported by another study, which somewhat adds to the confidence with which the results from this study can be interpreted.⁵

Considerable improvements in antimicrobial stewardship were seen when comparing the group of patients receiving a consult to those who did not. This enhancement in stewardship was primarily via reduced utilization of antipseudomonal coverage, vancomycin, and ceftriaxone, which demonstrated the key role that such programs can have on selecting therapy with an appropriately narrow spectrum. One way by which OPAT can reduce costs and improve patient outcomes comes via the involvement of ID specialists to improve the selection of appropriately narrow-spectrum antimicrobials. By avoiding the use of overly broad coverage, the risk of off-target eradication of the gut microbiome and subsequent development of a *C. difficile* infection can be significantly reduced. Beyond the clinical impact of this variety of infectious diarrhea, *C. difficile*'s propensity for toxin production leads to 4.8 billion dollars in additional costs to hospitals in the United States annually.⁶ For example, unnecessary use of ceftriaxone, a cephalosporin utilized for a variety of infections, has become one of many potential targets for antimicrobial stewardship programs because of its common use and propensity for causing this type of infection.^{6,7} It is imperative that therapies be selected appropriately to cover only the types of microorganisms likely to be causing the patient's infection and that therapies be narrowed when culture and susceptibility data are available. This is a major point of potential impact for pharmacist-led OPAT services.

The difference in readmissions seen for patients without a consult sent to a SAR center or ECF may hint at a potential positive influence seen with the inclusion

of a dedicated ID clinical pharmacy specialist to coordinate careful monitoring during the course of OPAT. Especially when utilizing agents requiring therapeutic drug monitoring, such as vancomycin or aminoglycosides, the potential for significant adverse effects is considerable. Additionally, poor availability of lab data during the course of OPAT has been noted to be a significant risk factor for readmission, which may partially explain the difference seen here.⁸ The potentially increased debility or acuity of patients more likely to be sent to a SAR center or ECF, in comparison to a patient able to be sent home, could have also contributed to this observation; however, an increase in readmission for patients discharged to these facilities after receiving a consult was not observed.

The need for appropriate monitoring and communication between healthcare systems should be given careful consideration prior to the implementation of OPAT. One report noted that 26% of sites surveyed had a team specifically designated to handle OPAT cases.⁵ A survey of practitioners involved in an OPAT service indicated that up to 70% had seen such therapy implemented without a consult from an ID specialist, and another study showed that the addition of a pharmacist or ID physician or pharmacist to an OPAT team raised adherence to monitoring by 32% and 64%, respectively.^{9,10} One study showed that cases reviewed by an ID physician led to changes in therapy from parenteral to oral agents in 27%–40% of cases.⁹ This shows the value of a dedicated OPAT team's ability to improve patient care via appropriate selection of antimicrobial therapy from a therapeutic perspective, which often reduces costs.

Although poor communication can be a barrier to the success of OPAT, adverse effects have been cited as the primary reason for OPAT discontinuation or therapy modification in 3%–5% of cases.⁹ The rate of readmission, potentially requiring a change in therapy, in this study for adverse events in the OPAT and non-OPAT groups was similar to this cited figure, at 3.2% and 4.5%, respectively. A survey of ID physicians conducted in 2012 showed that only 22% of the OPAT programs in which they worked had a way to track medication errors, “near misses,” or adverse events.⁵ Additionally, it is of utmost importance that patients who are to receive OPAT be carefully selected to ensure that they have appropriate social and financial support to receive therapy at home, at an infusion center, or at another location. The potential ramifications for patients inappropriately selected for outpatient therapy include both clinical decompensation as well as the potential for enhanced resistance by the responsible pathogen due to incomplete eradication.

Several limitations should be considered when interpreting the results of this study. The small sample size and timing of the study period at the advent of the

program could have affected the results. This trend could possibly have been due to the novelty of the new program or to increased provider confidence in the utilization of a formalized OPAT program able to more consistently offer improved monitoring and follow-up after discharge. The lack of assessments related to appropriateness of therapy, comorbidities, severity of infection, and causative pathogen limits the generalizability of these findings.

As OPAT services continue to expand in the United States, further investigations utilizing larger sample sizes and examining shifting trends in patient outcomes should be conducted in order to further assess the value of the program and monitor for potential quality-improvement opportunities. Furthermore, patient and provider satisfaction data could be included to better assess the improvements in quality of life and perception of value associated with the program. This study suggests a potential indication for the potential patient-care improvements related to improved patient outcomes that OPAT services can offer to patients.

References

1. Tice AD, Rehm SJ, Dalovisio JR. Practice guidelines for outpatient parenteral antimicrobial therapy. *Clin Infect Dis.* 2004;38:1661-1672. doi:10.1086/420939.
2. Ruh CA, Parameswaran GI, Wojciechowski AL, Mergenhagen KA. Outcomes and pharmaco-economic analysis of a home intravenous antibiotic infusion program in veterans. *Clin Ther.* 2015;37(11):2527-2535. doi:10.1016/j.clinthera.2015.09.009.
3. Chung EK, Beller CB, Muloma EW, et al. Development and implementation of a pharmacist-managed outpatient parenteral antimicrobial therapy program. *Am J Health Syst Pharm.* 2016;73(1):e24-e33. doi:10.2146/ajhp150201.
4. Diaz Granados CA. Prospective audit for antimicrobial stewardship in intensive care: impact on resistance and clinical outcomes. *Am J Infect Control.* 2012;40(6):526-529. doi:10.101/j.ajic.2011.07.011.
5. Lane MA, Marschall J, Beekmann SE, et al. Outpatient parenteral antimicrobial therapy practices among adult infectious disease physicians. *Infect Control Hosp Epidemiol.* 2014;35(7):839-844. doi:10.1086/676859.
6. Scott II RD. The direct medical costs of healthcare-associated infections in U.S. hospitals and the benefits of prevention 2009. Division of Healthcare Quality Promotion National Center for Preparedness, Detection, and Control of Infectious Diseases, Centers for Disease Control and Prevention.
7. Ceftriaxone [package insert]. Indianapolis, IN: Hoffmann La Roche; 1984.
8. Huck D, Ginsberg JP, Gordon SM, et al. Association of laboratory test result availability and rehospitalizations in an outpatient parenteral antimicrobial therapy programme. *J Antimicrob Chemother.* 2014;69(1):228-233. doi:10.1093/jac/dkt303.
9. Muldoon EG, Snyderman DR, Penland EC, Allison GM. Are we ready for an outpatient parenteral antimicrobial therapy bundle? A critical appraisal of the evidence. *Clin Infect Dis.* 2013;57(3):419-424. doi:10.1093/cid/cit955.
10. Shah PJ, Bergman SJ, Graham DR. Monitoring of outpatient parenteral antimicrobial therapy and implementation of clinical pharmacy services at a community hospital infusion unit. *J Pharm Pract.* 2014;28(5):462-468. doi:10.1177/0897190014544786.

BORDER SECURITY AND IMMIGRATION POLICY: THE FIGHT AGAINST TERRORISM

CAROLINE KLENCK, BUTLER UNIVERSITY
MENTOR: KENNETH COLBURN, JR.

Introduction

The 9/11 terrorist attack resulted in the death of 2,996 people after the hijacking of American Airlines Flight 11 and United Airlines Flight 175 attributed to al-Qaeda's leader, Osama bin Laden. After this devastating event, many countries reevaluated their border security and immigration policies to try to prevent any future destructive attacks. The fear of terrorists again grew after the 2015 Paris attacks, which resulted in the death of 130 people: "The triad security/immigration/terrorism has now reached enormous significance after the terrorist attacks of 13-N in Paris that have killed more than 120 people" (De Castro Sanchez 2017:244). Citizens fear for their safety, and it is put into the government's hands to protect them. Many people believe there should be more liberal policies to allow more access for people to enter the country, while others believe there should be much stricter policies to ensure safety by not allowing any migration.

One of the biggest controversies to arise recently is Donald Trump's promise to build a wall between the United States and Mexico. The wall was one of the greatest points in Trump's campaign, and one reason he was elected. Many question who will pay the bill and how much the wall will actually help. One of the reasons given to build the wall is to make it more difficult for people to illegally come into the country. In terms of the terrorist debate, how many terrorist attacks have there been from Mexico to the United States? Zero.

The debate has emerged: do these restrictive immigration policies and increased border security in fact reduce the probability of future terrorist attacks? "Academic and policy circles are in the dark as to how those different restrictions [immigration policy] affect the flow of immigrants and the consequent likelihood of terrorism. It is reasonable to speculate that not all restriction policies are equal in their ability to reduce or deter terrorism" (Choi 2018:16). Many research papers have focused only on immigration or border security, but very few have considered both. According to d'Appollonia (2008:228), "There is strong evidence that terrorist threats are not only external but also deeply rooted in domestic issues.

European governments ... still emphasize the external dimension of terrorism by using border controls and restrictive asylum policies as a way to improve their internal security.” The internal (immigration) and external (borders) workings of government both play roles in preventing terrorism, and it is the goal of this paper to discover the scope of the roles they play.

Literature Review

Why build a wall? Many states ask themselves this question while weighing the pros and cons of doing so; however, “the growth in violence by nonstate groups has led government to use fences to prevent insurgent activity and transnational terrorism” (Avdan and Gelpi 2017:14). Avdan and Gelpi (2017:23) found a positive association between fencing and terrorist attacks: “The incidence of transnational terrorist attacks across fenced border-years is approximately 4.8 percent, while the incidence across unfenced border years is just under 1.9 percent.” Jellissen and Gottheil (2013), however, found that “on the utility of security fences along international borders,” both Israel and India built walls because of armed conflicts with neighboring states, and both walls resulted in a decreased number of total civilian fatalities during terrorist attacks between 2003 and 2009. Although the research results of Avdan and Gelpi and of Jellissen and Gottheil conflicted, both pairs of researchers looked only at the presence of a wall, not also at border security. As Jellissen and Gottheil (2013:267) state, walls are “designed to obstruct the free and natural flow of demographic and economic movement.” In contrast, borders are permeable and allow movement of goods and services under the scrutiny of safety measures by personnel. It is important to note the difference between walls and borders to understand the level of protection that is being supplied.

Border security fulfills both long- and short-term strategies in the fight against terrorism. Short-term strategy looks at the plans and operations to interrupt terrorists and block their ability to achieve their goals. Long-term strategy focuses on preventing the growth of terrorist groups through ideologies and on building stronger international coalitions (Willis et al. 2010:17). Short-term actions include preventing terrorist attacks, blocking the transport of weapons of mass destruction to states, and denying terrorists support or control of any state. Long-term actions include promoting international partnerships and enhancing government counterterror infrastructure and capabilities. Willis presents that terrorism is fought not just by the presence of a wall but also by border security, which attempts to actively disrupt and hopefully stop future terrorist attacks.

With new terrorist threats and attacks, many countries are more inclined to make their security and immigration policies stricter. European governments, according to d'Appollonia (2008:228), have raised concerns about asylum seekers in particular because they are “the second most prevalent group of discrimination victims because of the perceived threat that they are potential ‘international terrorists.’ ” There is a balance that many governments try to achieve that is not too restrictive, which may result in criticism that they are building a “fortress,” but also isn’t too liberal, as legal or undocumented immigrants or asylum seekers have the potential to threaten internal security. New immigrants do not have strong ties to their receiving country and therefore may not have as many qualms about betraying that country.

Choi (2018) conducted a study on restrictive immigration policies. A debate was formed: “On the one hand, terrorism is likely to decrease when states impose immigration restrictions based on skill or wealth, or when states offer immigrants limited legal rights that permit only restricted residence and designated employers. On the other hand, terrorism is expected to increase when states allow no special visas or procedures to recruit immigrants, or when states give workers citizenship only when they are born to a native parent” (Choi 2018:14). Choi summarizes the biggest struggle countries face when making policies: There is a hard balance to find what will work best for each country, or what kind of policy is most effective.

A leaked memo from Dr. Frank Luntz, a famous communications expert, to the U.S. Republican party in 2005 discusses concerns that the United States may have about liberal policies with both border security and immigration/migrant policies: “ ‘Border security is homeland security. In a post-9/11 world, protecting our borders has taken on a whole new importance.’ As fear of terrorist attacks in the United States grows, this suggested framing has become the dominant narrative in the U.S. debate regarding refugees” (Voss 2018:43–44). The United States has clearly been moving toward strict immigration policies and border security, but has it been as successful in preventing terrorist attacks as other countries with more liberal policies?

Although research has been done on borders and terrorism, not much has been done concerning border security and terrorism. There has also been research on immigration policy and terrorism. Most of the available research has focused on small related groups of countries, such as Western democracies or a few countries that have strong conflicts with their neighbors, such as India. There has been very limited research on both immigration policy and border security along with terrorism, even though many studies have commented that the concepts have

recently been tied together: “the triad security/immigration/terrorism has now reached enormous significance” (De Castro Sanchez 2017:244).

According to the European Parliament (2018), there were 135 deaths in 13 attacks in 2016, compared to 62 deaths in 33 religious terrorist attacks in 2017; “Ten of these thirty-three attacks were ‘completed’, while twelve failed to reach their objectives in full and eleven were foiled, mostly in France and the UK.” Seven hundred and five (705) people were arrested in 18 EU countries on involvement or suspicion of involvement in jihadist terrorist activities. In 2017, there were more failed attacks compared to 2016. Although there has been an increase in failed attacks, there has been no research on a correlation of this increase with immigration policy or border security.

This paper seeks to answer the following question: How do border security and immigration policy affect terrorism across borders? Other questions I will touch on while conducting my research are: How fluid are their borders? How strict is their border security? What is their definition of citizenship? What are the rights of noncitizens? How many illegal immigrants enter the country? How firm is the enforcement of law?

This paper investigates both border security and immigration policy because they have been shown to work hand in hand. It will also look at countries all over the world, rather than a single cohesive group. I predict that weak central government, inadequate border security, and insufficient immigration policy foster terrorism. I hope my research will shed new light on border security and immigration policies regarding their effect on terrorism, especially because these have been topics of heightened concern and debate in recent years.

Methodology

For data, this paper uses the Global Terrorism Database (GTD) provided by the University of Maryland, a reputable school. The GTD is an open-source database that collects information about terrorist attacks around the world from 1970 through 2017 and has been used in numerous studies. This data set contains both domestic and international terrorist incidents. The GTD’s variables are split into eight categories: GTD ID and Date, Incident Information, Incident Location, Attack Information, Weapon Information, Target/Victim Information, Perpetrator Information, Casualties and Consequences, and Additional Information and Sources. My research focused primarily on dates and incident locations. Throughout my research, I utilized the year each attack occurred to examine the

policies implemented in that country during the same year. (For a complete list of the number of terrorist attacks per year per country, see Appendix A.)

I collected data on immigration policies from the Library of Congress, which provides information on refugee law and policy, citizenship pathways and border protection, and family-reunification laws for many countries. The Library of Congress is a reliable source. This was a starting point for much of the information to determine the restrictiveness of policies and border security.

Additional sources used to collect data are individual countries' laws, because going directly to the source rather than only to sources summarizing the policies gives the best and most reliable information for determining how restrictive a policy is and how strong a country's border security is.

The independent variable is immigration policy. To measure the level of restrictiveness of immigration policy, I utilized a format designed by Margaret E. Peters in her research "Open Trade, Closed Borders: Immigration Policy in the Era of Globalization" (2014). There are eleven subcategories of immigration policy: nationality, skill, quotas, recruitment, work prohibitions, family reunification, refugee policy, asylum policy, citizenship, deportation, and enforcement (Table 1). Each of these subcategories is coded on a scale from 1 to 5, with 1 being the most conservative and 5 being the most liberal. Conservative policies include complete closed borders or lack of entry for any asylum seekers or refugees, or, if allowing immigrants, policies deny immigrants rights or access to welfare and other benefits. Liberal policies include open borders; no quotas; high levels or high entry of immigrants, refugees, and asylum seekers; equal rights for these people when compared to citizens; and access to benefits such as welfare and health care. (For each country's overall score in each category, see Table B.1.)

Category	Subcategory	Description
Border Regulations	Nationality	Used as a basis for immigration restrictions
	Skill	Restricts based on skill or wealth
	Quota	Limits number of immigrants each year
	Work prohibitions	Imposes restrictions on industries worked in or positions held
	Family reunification	Allows varying levels of family reunification
	Refugee policy	Sets entrance policies for refugees outside the state
	Asylum policy	Sets entrance policies for those claiming refugee status at the border
Immigrant Rights	Citizenship	Defines who can be a member of the state
	Other rights	Outlines other rights for immigrants
Enforcement	Deportation	Regulates who can be deported, and how
	Other enforcement	Imposes other enforcement measures

Table 1. Categories and Subcategories of Immigration Policy. Source: Choi (2018).

The dependent variable is the number of terrorist attacks. The definition I used for terrorist attack is the GTD’s definition: “the threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation.”

I chose at least one country per region of the world in order to have a global scale. The countries I decided to evaluate often receive a lot of media attention and have developed enough to have consistent data. The countries I chose were Rwanda (Africa), China (Asia), Germany and Sweden (Europe), Brazil (South America), the United States (North America), and Australia (Oceania). I chose to not include Antarctica because of the highly unpopulated area. Past research has focused mostly on cohesive groups of countries such as Western democracies or those with specific conflicts, such as those based on religion, rather than conflicts with a wide variety of possible causes, such as economic stability, corruption, and government.

A score was given to each of the 11 subcategories of immigration policy to measure the restrictiveness of the policy (see Appendix B). In analyzing the data, I compared the average policy restrictiveness for each year compared to the number of terrorist attacks. Comparing the number of terrorist attacks from before and after a restrictiveness score change will allow me to understand if these policies have been effective and if that effectiveness is contingent on how liberal (5) or conservative (1) the policies are.

Findings

Australia

Score: 2.9 (See Table B.2)

Nationality: 4. Almost all nationalities are allowed into Australia (Simon-Davies 2018).

Skill/Income: 1. Australia is focused on receiving only highly skilled and educated workers (Buchanan 2013). The 1994 Migration Regulations draw focus to skill-typed work visas.

Quota: 1. The migration program is separated into three streams: skill, family, and special eligibility. For 2018–2019, 190,000 total spots were available, including 128,550 for skilled laborers, 57,400 for partner visas for family reunification, and 565 for special eligibility. This program is set by the Australian government's budget process (Australian Government 2018).

Work Prohibitions: 5. The 1951 Convention Relating to the Status of Refugees and the 1967 Protocol required states to allow refugees to work and engage in wage-earning employment, including the right to self-employment (United Nations High Commissioner for Refugees (UNHCR) 2010). Australia is seeking out skilled workers and has no restrictions set on any positions available to immigrants other than national security positions or the number of immigrants who can work in a given firm.

Family: 3. Australia's migration program has a family stream that includes partner visas. These visas allow Australians to connect with their family members from overseas, in addition to providing a pathway to citizenship. (Australian Government 2018) An immigrant applying for his or her own visa "can include his or her spouse or partner (except in the case of the woman at risk visa), dependent children, and other dependent relatives in the visa application" (Buchanan 2013).

Refugee: 3. According to the Migration Act 1958, to be considered a refugee and be granted a protection visa, an individual must fear prosecution or serious harm based on their race, religion, nationality, membership of a particular social group, or political opinion and must not have committed a crime against peace, a war crime, a crime against humanity, or any serious crime before entering Australia (Australian Government 2019). The Refugee and Humanitarian Program holds 18,750 places for refugees. No test is required to receive a protection visa.

Asylum: 4. There are three visas set up for those seeking asylum: permanent protection visa, temporary protection visa, and safe haven enterprise visa. Once one has applied for a protection visa, they may receive financial assistance, health care, and help with other visa-related costs through the Asylum Seeker Assistance Scheme. With a protection visa, one is allowed to live, work, and study in Australia permanently (Buchanan 2016). There are 18,750 places available for all refugees and asylees. Since 2014, those seeking asylum in Australia without a valid visa are taken to a third country for processing and resettlement and are not able to apply for visas in Australia (Australian Government 2018).

Citizenship: 4. According to the Australian Citizenship Act 2007, a person born in the country is automatically an Australian citizen only if one parent is an Australian citizen or permanent resident. Anyone with a permanent residence visa who “[satisfies] residence requirements, [is] of good character, possess[es] a ‘basic knowledge of the English language,’ and [has] ‘an adequate knowledge of Australia and of the responsibilities and privileges of Australian citizenship’ ” can obtain citizenship. Those applying for citizenship must also pass a citizenship test and have lived in the country for at least four years (Buchanan 2013).

Immigrant Rights: 3. Some rights given to migrants include visa and travel costs, access to the Australian Cultural Orientation Program (a five-day course designed to prepare visa holders to travel to Australia and settle in; to provide information on laws, values, lifestyle; and more), and access to the Adult Migrant English Program (510 free hours delivered by the Department of Education and Training). In addition to those programs, refugees are able to apply for government payments and for access to Australia’s national health care system, Medicare.

The Humanitarian Settlement Services Program is a voluntary program delivered by a nongovernment service provider. The program includes arrival reception and assistance; help finding accommodation; property induction; an initial food package and start-up pack of household goods; orientation information and training; help registering with Medicare, health services, welfare, banks, and schools; and help linking with community and recreational programs (Buchanan 2013).

Deportation: 4. The minister may order the deportation of a noncitizen according to Division 9 of the Migration Act. Deportation can occur if a noncitizen is convicted of a serious offense.

Unlawful noncitizens are subject to mandatory immigration detention, during which detention they can apply for a visa. A person may be held in detention

until he or she is granted a visa or is deported. There is no limit to the length of time that a person may be held in immigration detention (Buchanan 2013).

Enforcement: 2. The Department of Immigration and Citizenship, Centrelink, the Australian Taxation Office, and the Australian federal and state police all work on locating unlawful noncitizens, including those who are illegally employed or who claim welfare payments to which they are not entitled (Buchanan 2013).

The Australian Border Force is located in all Australia's major and regional international airports; more than 60 international seaports around the country, including those in remote areas such as mining ports; and locations where international air and sea cargo, including mail, are processed after import or before export (Australian Border Force 2018). Border Force officers check the identities of all travelers and ensure that those travelers have relevant travel documentation in place. Officers also examine people, baggage, aircraft, ships, and small craft for drugs, tobacco, and prohibited goods and images, and they seize illegal goods and regulated items, among performing other checks. The Counter Terrorism Units help with inbound and outbound national security risks and are located around Australia's international airports and airports that operate international sectors (Australian Border Force 2018).

In 2013, Australia launched the National Security Strategy. The Strategy works on the increasing movement of people and goods to Australia, growth in transnational crime, and "ongoing irregular migration patterns," including increasing use of risk-based systems to target threats; enhancing cooperation across border security, law enforcement, and intelligence agencies; cooperating with regional partners to counter people smuggling; and implementing the recommendation of the *Report of the Expert Panel on Asylum Seekers* (Buchanan 2013).

Brazil

Score: 3.1 (See Table B.3)

Nationality: 4. Brazil has no laws or restrictions on nationalities allowed in.

Skill/Income: 1. Brazil focuses on highly skilled workers (Meyer 2010).

Quota: 4. Brazil has no quota for the number of people who can enter annually.

Work Prohibitions: 5. According to Brazil's general immigration policy, aliens need to have authorization to work. Tourist-, transit-, or temporary-visa holders cannot work (Soares 2013). Since the New Migration Law came into effect in 2017,

temporary visa holders can be eligible for work with or without an employee contract. Instead, they only need to prove they have a higher-degree diploma or equivalent (Brazil Immigration 2018).

Family: 4. Brazil's law allows a refugee to include many members of the refugee's family as long as the members are economically dependent on that refugee (Soares 2013).

Refugee: 3. The aliens statute of 1980's Law No. 6,815 defined the legal situation of aliens in Brazil and created the National Council of Immigration. Under this law, political asylees must abide by international and domestic laws. Brazil also has a humanitarian visa for refugees (Soares 2013).

Of 33,660 asylum applications in 2017, Brazil accepted 546. Brazil was selective, allowing in people from Syria, Nigeria, Congo, Guinea, Pakistan, Lebanon, Cameroon, Egypt, Iraq, Mali, and Sudan. As of 2015, a total of 713,568 migrants lived in Brazil (World Data 2017).

Asylum: 2. Being granted asylum in Brazil is a difficult process. Decree No. 42,628, of November 13, 1957, promulgated the Convention of Diplomatic Asylum and laid out the asylum process. Each state is not obligated to grant asylum or to give reason for refusal. Additionally, asylum may not be given except in emergency cases (Soares 2013). Though the process is very difficult and many are not allowed in, "[applicants] can appeal to the Minister of Justice within fifteen days from the receipt of the notification" (Soares 2013).

Citizenship: 4. Gaining citizenship in Brazil is moderately difficult. Decree No. 6,815, of August 19, 1980, laid out citizenship requirements. There is a language requirement, and the applicant must have residence for four years, along with other requirements, such as having a suitable job and good behavior and health (Soares 2013).

Immigrant Rights: 4. Immigrants in Brazil have many rights, equal to those of Brazilian citizens (Soares 2013). Rights include access to welfare and right to ownership of property. Non-Brazilian citizens are not able to vote.

Deportation: 3. The Ministry of Justice is in charge of deportation, and the Federal Police are in charge of arresting and deporting aliens. The Brazilian Penal Code (1940) is followed for deportation, and those deported include those who illegally enter, who act against national security or public order, or who demonstrate other intolerable behavior (Soares 2013).

Enforcement: 2. Overall, border enforcement is strong in Brazil. The Northern Border Protection's 1985 Projecto Calha Norte put military units along the Brazil border. The Northern Border Protection, Amazon Surveillance, Airspace Protection, and the Strategic Border Plan all work together to enforce immigration policies and border enforcement (Soares 2013).

Brazil has more than 10,000 miles of borderland shared with 10 countries. Only about 4,000 miles (in the populous and developed southern zone) has been defended regularly by the army. Brazil has a total of 23 official border crossing points; the rest of the country's borders are wide open, and many groups have routes to smuggle people and goods into Brazil (Cope and Parks 2014).

China

Score: 2.6 (See Table B.4)

Nationality: 4. China lets in people of almost all nationalities (CIA 2019; Haimei 2011).

Skill/Income: 2. China primarily focuses on obtaining highly skilled workers but also looks to the economy and social needs for what kind of jobs are available and need to be filled, as shown in the Exit and Entry Administration Law of People's Republic of China (Jintao 2013).

Quota: 5. China has no quota for what percentage of the population can enter annually.

Work Prohibitions: 5. Immigrants welcomed into the country for the labor market are not restricted to positions they can hold or by number of immigrants allowed to work in a given occupation. The 1951 Convention Relating to the Status of Refugees and the 1967 Protocol Relating to the Status of Refugees (UNHCR 2010) requires states to allow refugees to work. Article 17 states that each state shall give refugees the right to engage in wage-earning employment, including the right to self-employment (UNHCR 2010).

Family: 3. China's permanent resident rules (2004) allow for spouses and unmarried children under the age of 18 to apply for permanent residence at the same time as the alien applying. A spouse who has been married to a permanent resident for five years and has a stable income and housing, any unmarried children under the age of 18, and direct relatives 60 years old who have no other relatives in China are all eligible to apply for permanent residence (Global Legal Research Directorate Staff 2014).

Refugee: 2. Entering China as a refugee may be very difficult. Article 19 of the Exit and Entry Administration Law of the People’s Republic of China states that foreigners applying for visas “need to provide written invitation issued by entities or individuals within China” (Jintao 2013). As of 1982, China does follow the 1951 Convention Relating to the Status of Refugees and the 1967 Protocol Relating to the Status of Refugees, adopting the UN definition of refugee (UNHCR 2010).

As of June 2015, China had 301,057 refugees (Zhang 2016). Refugee registration and refugee status are conducted by the UNHCR Beijing office. Article 46 of the Exit and Entry Administration Law of the People’s Republic of China allows those applying for refugee status to stay in China while the screening process is being conducted (Jintao 2013).

Asylum: 2. Article 15 of Order No. 31 (1985) states, “Aliens who seek asylum for political reasons shall be permitted to reside in China upon approval by the competent authorities of the Chinese Government.” Domestic law regarding refugees and asylum is still under development. The 2012 Law on the Administration of Exit and Entry allows refugees and asylum seekers to obtain ID cards (Jintao 2013).

Citizenship: 3. The process of naturalization is very difficult and is rarely granted. The Nationality Law of 1980 lays out the process of naturalization. Naturalization is not very common other than through marriage or through great contribution; however, a foreign national or stateless person who will obey China’s constitution and laws and who is a close relative to a Chinese national, has settled in China, and has other legitimate reasons may be naturalized (Zhang 2015).

Immigrant Rights: 2. Article 46 of the Exit and Entry Law gives refugees and asylum seekers the right to ID cards, along with the possibility of the right to work and the right to education (Zhang 2016). Chinese law includes nothing about giving immigrants the right to welfare, property, or religion (Jintao 2013).

Deportation: 2. Articles 4 and 29 of the Law of the People’s Republic of China on Control of the Entry and Exit of Aliens lay out the guidelines for deportation and arrests. Article 4 lays out the rights of aliens on Chinese territory, and Article 29 lays out the consequences for those who enter illegally.

Enforcement: 1. The Public Security Border Control Troops (People’s Armed Police Border Control Troops) enforce China’s land and coastal borders and maritime security. This includes border inspections to prevent illegal border crossings, drug trafficking, and smuggling, and organization of and participation in counterterrorist and emergency-management operations (Zhang 2015).

China has border control stations at all major Chinese airports, seaports, and land border stations. The Ministry of Public Security staffed the professional police into its border police force. Now, General Border Inspection Stations are in nine major cities: Beijing, Tianjin, Shanghai, Guangzhou, Shenzhen, Zhuhai, Xiamen, Haikou, and Shantou (Zhang 2015).

Germany

Score: 3.2 (See Table B.5)

Nationality: 4. Germany welcomes almost all nationalities.

Skill/Income: 2. Germany limits acceptance of immigrants to skilled workers needed by German employers (Palmer 2013). Section 19 of the Residence Act of 2004 allows permanent settlement permits for highly qualified foreigners (Bottcher 2018).

Quota: 5. Germany has no quota system.

Work Prohibitions: 5. The 1951 Convention Relating to the Status of Refugees and the 1967 Protocol Relating to the Status of Refugees requires states to allow refugees to work; Article 17 states that each state shall give refugees the right to engage in wage-earning employment, including the right to self-employment (UNHCR 2010). Germany has no restrictions on what or how many positions can be held by immigrants in any given firm.

Family: 2. Section 104, Transitional provisions, of the Residence Act explains which family members of immigrants can also become residents of Germany; “spouses, registered same-sex partners, minor children, and parents of minor children are considered family members” (Global Legal Research Directorate Staff 2014).

Refugee: 2. Germany’s Asylum Act (2008) and the UN definition of refugee (Convention of 1951 on legal status of refugees) lay out the definition for refugees, and the requirements. The Residence Act of 2004 lays out the current immigration system. Before this, Germany was not very welcome to immigrants. The Residence Act “promotes integration by shortening the periods of residence required before granting permanent status and by requiring language skills and acculturation for renewals of residence permits” (Gesley 2016).

Asylum: 4. The Acceleration of Asylum Procedures 2015 “amended several laws in order to accelerate the asylum process; substitute in-kind benefits for cash benefits; reduce the financial burden on the German states and municipalities;

reform integration policies for refugees.” Asylum seekers receive essential items such as food, housing, heat, clothing, health care, and household items in the form of vouchers. The Federal Employment Agency assumes costs for integration and for language classes for asylum seekers who are likely to be approved. The right to asylum is a constitutional right in Germany and is granted to everyone who flees political persecution (Gesley 2016).

Citizenship: 4. To acquire German citizenship, candidates must qualify via naturalization, right of blood, or right of soil. To qualify via naturalization, seekers must live in the country for eight or more years, be German-language proficient, be financially stable, pass a citizenship test, and renounce any previous citizenships. By right of blood, a candidate can only be a direct descendant of German citizens—only parents. By right of soil, a candidate must be born within the borders of Germany (Germany Visa 2019).

Immigrant Rights: 2. The Asylum Seeker Benefits Act of August 5, 1997, provides refugees and asylum seekers with food, housing, clothing, health care, and household items (Gesley 2016).

Deportation: 3. On the grounds of public security and order, deportation is allowed if someone has entered illegally, hasn’t applied for residence, or needs to return to a different member state. It would become necessary to leave the country with the denial of residence title (Bottcher 2018).

Enforcement: 4. Because Germany is a member of the Schengen Agreement (1985) and shares borders with Poland, Czechia, Switzerland, Austria, France, Belgium, and Luxembourg, the country does not maintain border checkpoints. Germany relies on Schengen countries with external borders to enforce immigration and customs laws. Germany’s only external borders are on the coasts of the North and Baltic Seas and international airports. The German Federal Police still have the responsibility of protecting borders against illegality, such as via random checks of the border area (Palmer 2013).

Rwanda

Score: 3.2 (See Table B.6)

Nationality: 4. Rwanda welcomes people of almost all nationalities. The country started issuing visas to Africans in 2013 (Mpirwa 2018).

Skill/Income: 1. The National Migration Policy is aimed at attracting skilled workers, promoting investment and tourism, and enhancing national security.

Immigration policy was designed in an effort to merge Rwanda's development strategies with the flow of people into the country (Immigration in Rwanda 2016).

Quota: 5. Rwanda has no quota on the percent of the population who can enter annually.

Work Prohibitions: 5. Rwanda has no restrictions on which positions immigrants can hold or how many immigrant workers can be in a given occupation.

Family: 2. Law No. 17/99 of 1999 on Immigration and Emigration (Chapter 3) focuses on the control of entry in the country, including family entry: "Article 14: On returning to Rwanda, wherever they are coming from, Rwandans and members of their families must be in possession of a passport or another document replacing the passport. Article 15: Entry in Rwanda following the clauses of article 14 of this law is also allowed to foreign residents in Rwanda as well as members of their families." In this law, "family" refers to spouses as well as to children aged less than 21 years of age.

Refugee: 5. The UNHCR provides cash assistance for refugees returning to Rwanda after 1999 from the Rwandan genocide. These refugees also receive three months of food rations and a year of health insurance. A total of 3,454,864 refugees have returned since 1994 (UNHCR 2018a,b). Hosting more than 150,000 refugees, Rwanda gives refugees the right to do business, as well as access to health services and insurance, banking, and education (Wachiaya, 2019).

Asylum: *n/a.* Asylum is not mentioned in Rwandan law; it therefore is not counted as a category in this study.

Citizenship: 4. To become naturalized, a person must be over 18 years of age, have good behavior, not be a burden to the nation, know Kinyarwanda, and present a receipt of payment to the Public Treasury. Natural status is determined by an Order of the Minister. A child born in Rwanda from an unknown or stateless parent cannot have citizenship (Republic of Rwanda 2004).

Immigrant Rights: 4. Refugees have the right to do business and to access health services and insurance, banking, and education (Wachiaya, 2019).

Deportation: 3. Any undesirable foreign person will be turned back from Rwanda as stipulated in Article 13 of Law No. 17/99 of 1999 on Immigration and Emigration. Anyone who enters illegally will be deported and may be penalized with imprisonment for anywhere from 15 days to 3 months, or with a fine of ten to five hundred thousand francs.

Enforcement: 4. Rwanda has an open border and secure country policy. Rwanda has some border enforcement with 17 border points, but there is little enforcement at the borders and screening points. The National Migration Policy described some of the nation's constraints on creating strong staff and borders: there is a lack of secure infrastructure, qualified and trained personnel, and equipment for proper border clearance.

Rwanda has been hosting thousands of refugees for decades and today is home to more than 170,000 refugees and asylum seekers, mainly from Burundi and the Democratic Republic of the Congo (DRC). The government supports the refugee response through provision of land for reception centers and refugee camps; it leads camp management and coordination and has demonstrated a progressive approach to refugees by committing to include them in national systems such as health insurance and education.

Sweden

Score: 3.9 (See Table B.7)

Nationality: 4. Sweden allows in people of almost all nationalities. The five largest countries of origin among asylum seekers were Syria, Afghanistan, Iraq, Eritrea, and Somalia (Hofverberg 2016).

Skill/Income: 3. Sweden has some preference toward skilled workers, especially specialists, but does let in lower-skilled workers (Swedish Migration Agency 2019).

Quota: 5. Sweden has a quota of 1,900 for refugees, which will gradually increase to 5,000, but does not have a quota system for immigrants as a whole.

Work Prohibitions: 5. The 1951 Convention Relating to the Status of Refugees and the 1967 Protocol Relating to the Status of Refugees requires states to allow refugees to work; Article 17 states that each state shall give refugees the right to engage in wage-earning employment, including the right to self-employment (UNHCR 2010). Sweden does not have any restrictions on what occupations immigrants can hold or on the number of immigrants allowed to work in a given occupation.

Family: 2. Family members who can be brought along are current or future spouses or cohabitants, as well as biological children under the age of 18 or children of the spouse/cohabitant (Global Legal Research Directorate Staff 2014).

Refugee: 3. Sweden adopted the Protocol from the Geneva Convention Relating to the Status of Refugees, recognizing the UN definition of a refugee. Sweden has a refugee quota starting at 1,900 but will increase that to the 5,000 given by the UNHCR program. These quota refugees are first screened by the UNHCR through in-person interviews or through a review of documents (Hofverberg 2016).

Asylum: 4. In 2015, Sweden received approximately 160,000 applications for asylum. Seekers are given free housing, health and dental care, and schooling for children ages pre-kindergarten to 20 (Hafverberg 2016). Those seeking asylum may be refused if they are deemed a refugee or in need of a subsidiary protection in an EU member state or a third country, or if the person can be sent to a country where they can apply for asylum (Hofverberg 2016).

Citizenship: 5. According to the Swedish Citizenship Act (2001), to be naturalized, one must provide proof of identity; be over the age of 18; hold a permanent Swedish resident permit; have been domiciled in Sweden for the previous two years if a Danish, Finnish, Icelandic, or Norwegian citizen, four years if a stateless person under the Aliens Act (2005), or five years for other aliens; and have led and be expected to lead a respectable life (Ministry of Industry 2001).

Immigrant Rights: 4. Article 3 of the 1951 Convention Relating to the Status of Refugees and the 1967 Protocol Relating to the Status of Refugees lays out nondiscrimination agreements in which the state will not discriminate based on race, religion, or country of origin (UNHCR 2010).

Asylum seekers receive monetary aid (free housing and monetary support while their applications are being processed), health and dental care (Health Care Act and the Act on Health Care for Asylum Seekers), schooling, housing, passports, and priority in schools with waiting lists (Hafverberg 2016).

Deportation: 5. Detention orders are most frequently issued by the Swedish Migration Agency (*Migrationsverket*, formerly the Migration Board) or the Police Authority. Detainees have access to an oral hearing before each review. The Aliens Act provides that migration detainees should be appointed a public counsel after three days in detention (Global Detention Project 2018).

Enforcement: 4. The Security Police, founded in 1989, can review applications and advise against the granting of asylum in certain cases to ensure that those who can be potential threats will not be given permanent residency rights or citizenship (Hafverberg 2016).

In November 2015, the Swedish government decided to reintroduce border controls at the internal border, meaning borders to other Schengen countries, at select border crossings. Persons entering Sweden need to show proof of the right to enter and stay in the country (e.g., by providing a passport or national ID card). Persons traveling to or from Sweden across an internal border are therefore advised to bring a passport or national ID card. The regulations surrounding external and internal border control are stipulated in the Schengen Borders Code, regulation (EU) 2016/399 (Border Control).

United States

Score: 2.7 (See Table B.8)

Nationality: 3. Several laws over the years had been created to exclude certain nationalities. The 1952 Immigration and Nationality Act gave back opportunities for Asians to immigrate into the United States. There was a quota of 100 visas per year. Executive Order 13780 of March 6, 2017 (Protecting the Nation from Foreign Terrorist Entry into the United States) has suspended and limited people of the following countries from entering the United States: Chad, Iran, Libya, North Korea, Syria, Venezuela, Yemen, and Somalia (Trump 2017).

Skill/Income: 2. The 1952 Immigration and Nationality Act created a preference system to prioritize visa applicants in countries with heavily oversubscribed quotas. Individuals with special skills or families already residing in the United States had precedence. This preference is still enacted today (Office of the Historian N.d.b). Temporary visas are available for both high-skilled and lesser-skilled employment, but the visa holders must leave once their status expires or if their employment is terminated. The permanent employment-based visas are divided into five preference categories (American Immigration Council 2016).

Quota: 1. The Immigration Act of 1992 was the first act to limit the number of immigrants allowed entry into the United States through a national origins quota (Office of the Historian N.d.a). The United States has an annual worldwide limit of 675,000 permanent immigrants, with an additional 50,000 refugee spots (American Immigration Council 2016); 140,000 visas are available for permanent employment-based immigrants. With a population of 327.2 million, only 0.002% of the population can enter annually.

Work Prohibitions: 5. Typically, non-U.S. citizens cannot work for the federal government.

Family: 3. The United States has a family-preference system determined in the Immigration Act of 1990. One may bring immediate relatives as long as they are spouses of U.S. citizens, unmarried minor children of U.S. citizens under the age of 21, and parents of U.S. citizens. The family-preference system includes adult children (married and unmarried) and brothers and sisters of U.S. citizens, as well as spouses and unmarried children (minor and adults) of a lawful permanent resident. There are 480,000 preference-system visas available (American Immigration Council 2016).

Refugee: 3. Following the Vietnam War, the Refugee Act of 1980 raised the annual ceiling for refugees from 17,400 to 50,000 in addition to changing the definition of refugee to that established by the United Nations' 1951 conventions and 1967 protocols (U.S. Congress 1980). During the Obama administration, the refugee ceiling was set at 110,000, but the Trump administration reduced it to 50,000. In addition to reducing the refugee admission ceiling, the Trump administration also suspended the entire U.S. refugee admissions program for 120 days in 2017 and has indefinitely suspended the entry of Syrian refugees (American Immigration Council 2018b).

Asylum: 4. Those seeking asylum may apply at any port of entry or within one year of arriving to the United States. There are no limitations of the number of individuals able to be granted asylum in a given year (American Immigration Council 2016). To be considered an asylee, one must have credible and reasonable fear during the screening processes.

According to the 1996 Illegal Immigration Reform and Immigrant Responsibility Act, all individuals who seek asylum at ports of entry will be detained and will remain there even after officials have confirmed their claims are credible. Some applicants are released if deemed unlikely to flee and as not posing a safety threat. The denial rate of asylum cases was at 61.8 percent as of 2017 (Cepla 2019).

Asylees can work, can apply for Social Security cards, can petition to bring family members to the United States, and may be eligible for benefits such as Medicaid or Refugee Medical Assistance (American Immigration Council 2018b).

Citizenship: 4. According to the 1952 Immigration and Nationality Act (§1401) regarding nationals and citizens of the United States, anyone born in the United States is a U.S. citizen, and anyone who is born outside of the United States but has a parent who is a citizen is a U.S. citizen. The 1952 Immigration and Nationality Act lays out the requirements that one must fulfill to become naturalized in the

United States. One must have an understanding of the English language (reading, writing, and speaking), along with an understanding of the fundamentals of the history and the principles and form of government. Additionally, a person must have lived in the United States for at least five years with no absence greater than six months in a one-year period and must also be of good moral character (Office of the Historian N.d.b).

Immigrant Rights: 3. The 1986 Immigration Reform and Control Act established the Systematic Alien Verification for Entitlements (SAVE) Program, “a system for verifying the immigration status of non-citizenship applicants for, and recipients of, certain types of federally funded benefits ... available to federal, state, and local benefit-granting agencies” (U.S. Citizenship and Immigration Services 2017). SAVE could be used for the Patient Protection and Affordable Care Act for health benefits. Immigrants with lawful permanent resident status are eligible for federal public benefit programs only after five years; however, immigrants are eligible for some state benefit programs (Cerza 2018).

Asylees can work, apply for Social Security cards, and petition to bring family members to the United States, and they may be eligible for benefits such as Medicaid or Refugee Medical Assistance (American Immigration Council 2018a). Anyone on a temporary work visa must leave the country if they leave or are fired from their job. Immigrants do have constitutional rights.

Deportation: 3. The United States deports foreign nationals who commit crimes, are threats to public safety, or violate their visas. The Illegal Immigration Reform and Immigration Responsibility Act of 1996 allows for the deportation of an undocumented immigrant who commits a misdemeanor or a felony. According to the American Immigration Council (2016), “Temporary work visas allow for the deportation of holders if their employment is terminated.”

Individuals who enter the United States without travel documents may be deported without an immigration court hearing or may go before a judge through the Immigration Court of the U.S. Department of Justice. Others who are facing deportation and feel that their civil rights are being violated may file complaints with the Department of Homeland Security. An undocumented immigrant is able to go through an adjustment-of-status process to get a green card through a petition by a family member or through asylum. Appeal of a deportation order is allowed, and those who wish to appeal may seek legal advice through nonprofit organizations (United States Government 2018).

Enforcement: 1. The Department of Homeland Security was founded in 2002. It had a budget of \$55.1 billion for 2010. Total staffing for border control was 20,558. (U.S. Customs and Border Protection 2018). As of 2019, the projected budget for the Department of Homeland Security is \$47.5 billion, with an additional \$6.7 billion for the Disaster Relief Fund. This budget is to “focus on strengthening the security of our Nation through increased emphasis on border security, immigration enforcement, cybersecurity and improving our overall law enforcement and national security posture.” Total staffing in 2017 was 19,437 (U.S. Customs and Border Protection 2018).

Results

Every country had the same value (5) for work prohibitions, so the category had to be thrown out because of zero variance. A bivariate correlation test through the Statistical Package for Social Sciences (SPSS) was conducted for each country to determine if any significant correlation existed between the number of attacks in a country and the restrictiveness of policies through the years. The null hypothesis is that there is no difference or correlation between the number of terrorist attacks and the policy-restrictiveness score.

The bivariate correlation tests showed no statistical significance for Australia, Brazil, Germany, Rwanda, or Sweden (see Tables C.1, C.2, and C.4–C.6). There is no relation between the number of attacks and the restrictiveness of these countries’ policies. Test for both China and the United States showed statistical significance (see Tables C.3 and C.7). The test for China demonstrated statistical significance at the 0.01 level, showing a correlation between the number of attacks and the restrictiveness of China’s policies. The test for the United States demonstrated statistical significance at the 0.05 level, showing a correlation between the number of attacks and the restrictiveness of U.S. policies. Although statistical significance was proven, the kind of correlation is not shown.

The United States and China showed statistical significance in the bivariate correlation tests. To determine what that correlation is, curve estimations in SPSS were used to show the linear regression between the number of attacks per year and the restrictiveness of policies. The curve estimation for China shows a negative correlation: as the restrictiveness score becomes more liberal, the number of attacks per year decreases, on average (see Table D.1 and Graph D.1). The curve estimation for the United States also shows a negative correlation, in which the number of attacks per year decreases on average as the restrictiveness score becomes more liberal (see Table D.2 and Graph D.2).

Australia, Brazil, Germany, Rwanda, and Sweden showed no correlation between number of terrorist attacks and their policy scores. I failed to reject the null hypothesis for these countries. China and the United States have the two lowest current immigration-policy scores, with 2.6 and 2.7 respectively. Both China and the United States showed the same results: as the policy-restrictiveness score increases, meaning policy is more liberal, the number of terrorist attacks per year decreases. I rejected the null hypothesis for both China and the United States and accepted the alternative hypothesis that a difference/correlation does exist between the number of attacks and a country's policy-restrictiveness score.

I combined all the terrorist attacks with their corresponding policy score. After a bivariate correlation test was conducted, results showed statistical significance at the 0.01 level for the correlation between the number of attacks and the restrictiveness-policy score (see Table C.8). To determine what the correlation was, a curve estimation test was conducted and revealed the same results as those for previous tests for the United States and China: a negative correlation. As the policy score increases, the number of terrorist attacks decrease (see Table D.3 and Graph D.3).

According to tests for the United States, China, and the total combined countries (Australia, Brazil, China, Germany, Sweden, Rwanda, and the United States), the more restrictive border security and immigration policy are, the more terrorist attacks there are. Though causation has not been found, a correlation has been found between policy/border security and terrorist attacks. On average, the more liberal a policy or border security is, the fewer terrorist attacks there will be. China and the United States had maximum policy scores below 3, however. It is unclear how extreme a policy may get before more terrorist attacks may occur.

Discussion

The question I sought to answer was "How do border security and immigration policy affect terrorism across borders?" I found that the more restrictive border security and immigration policy are, the more terrorist attacks there are.

Previous research done by Choi (2018:14) discussed the struggle that countries have in finding a balance between liberal and conservative policies: "On the one hand, terrorism is likely to decrease when states impose immigration restrictions based on skill or wealth, or when states offer immigrants limited legal rights that permit only restricted residence and designated employers. On the other

hand, terrorism is expected to increase when states allow no special visas or procedures to recruit immigrants, or when states give workers citizenship only when they are born to a native parent.” The findings from this study have shown the more liberal to moderate the policy, the fewer terrorist attacks there are. Choi makes a good argument on the balance that needs to be found. This research agrees with Choi’s findings.

There are many variables other than policy and border security that could also contribute to the number of terrorist attacks that a country experiences. Some include country relations, stability of the government, and political environment, among numerous others. Additional research could control for those additional factors or for certain aspects of the restrictiveness of immigration policy and border security to see if a strong correlation exists between a certain aspect rather than the policy as a whole. Furthermore, more countries could be studied to see if this correlation continues. Although this research attempted to get a wide variety of countries from all over the world, the countries studied did tend to be larger and more resourceful. Some countries that could potentially provide more in-depth information and have significantly more terrorist attacks may have a lack of resources to provide their policies to the public. Future research could also delve even more into border security. In this research, the border-security aspect fell mostly into the enforcement category of the policy-restrictiveness score. Although this information was necessary, there is the possibility that border security could be broadened and researched in greater detail. Future research with regard to border security could encompass the number of enforcements on the borders, the number of apprehensions made, the number of checkpoints located around the country, and the types of checkpoints, along with others.

References

- Aliens Act. 2005. Swedish Government. Retrieved (https://www.government.se/contentassets/784b3d7be3a54a0185f284bbb2683055/aliens-act-2005_716.pdf).
- American Immigration Council. 2016. "How the United States Immigration System Works." Retrieved (http://americanimmigrationcouncil.org/sites/default/files/research/how_the_united_states_immigration_system_works.pdf).
- American Immigration Council. 2018a. "An Overview of U.S. Refugee Law and Policy." Retrieved (https://www.americanimmigrationcouncil.org/sites/default/files/research/an_overview_of_united_states_refugee_law_and_policy_0.pdf).
- American Immigration Council. 2018b. "Asylum in the United States." Retrieved (https://www.americanimmigrationcouncil.org/sites/default/files/research/asylum_in_the_united_states.pdf).
- Australian Border Force. 2018. "Airports and Seaports." Retrieved (<https://www.abf.gov.au/about-us/what-we-do/border-protection/airports-and-seaports>).
- Australian Government. 2018. "Migration Program Planning Levels." Department of Home Affairs. Retrieved (<https://immi.homeaffairs.gov.au/what-we-do/migration-program-planning-levels>).
- Australian Government. 2019. "Australia Refugee and Humanitarian Program: About the Program." Department of Home Affairs. Retrieved (<https://immi.homeaffairs.gov.au/what-we-do/refugee-and-humanitarian-program/about-the-program/about-the-program>).
- Avdan, Nazli, and Christopher F. Gelpi. 2017. "Do Good Fences Make Good Neighbors? Border Barriers and Transnational Flow of Terrorist Violence." *International Studies Quarterly* 61:14–27.
- Bottcher, Lorenz. 2018. "Residence Act (Aufenthaltsgesetz, AufenthG)." German Law Archive. Retrieved (<http://germanlawarchive.iuscomp.org/?p=1464>).
- Brazil Immigration. 2018. "New Brazil Immigration Law. Retrieved (<https://brazilimmigration.com/>).

- Buchanan, Kelly. 2013. "Citizenship Pathways and Border Protection: Australia." Library of Congress. Retrieved (<https://www.loc.gov/law/help/citizenship-pathways/australia.php>).
- Buchanan, Kelly. 2016. "Refugee Law and Policy: Australia." Library of Congress. Retrieved (<https://www.loc.gov/law/help/refugee-law/australia.php>).
- Central Intelligence Agency. 2019. "The World Factbook." Retrieved (<https://www.cia.gov/library/publications/the-world-factbook/>).
- Cepla, Zuzana. 2019. "Fact Sheet: U.S. Asylum Processes." Retrieved (<https://immigrationforum.org/article/fact-sheet-u-s-asylum-process/>).
- Cerza, Sydney. 2018. "Fact Sheet: Immigrants and Public Benefits." National Immigration Forum. Retrieved (<https://immigrationforum.org/article/fact-sheet-immigrants-and-public-benefits/>).
- Choi, Seung-Whan. 2018. "Does Restrictive Immigration Policy Reduce Terrorism in Western Democracies?" *Perspectives on Terrorism* 12(4):14–25. Retrieved (<https://www.jstor.org/stable/26482976>).
- Cope, John, and Andrew Parks. 2014. "Frontier Security: The Case of Brazil." Institute for National Strategic Studies. Retrieved (<https://apps.dtic.mil/dtic/tr/fulltext/u2/1014327.pdf>).
- d'Appollonia, Ariane Chebel. 2008. "Immigration, Security, and Integration in the European Union." Pp. 203–228 in *Immigration, Integration, and Security: America and Europe in Comparative Perspective*, edited by A. C. d'Appolonia. Pittsburgh, PA: University of Pittsburgh Press. doi:10.2307/j.ctt5vkgr2.15.
- De Castro Sanchez, Claribel. 2017. "Security, Migrant Flows, and Terrorism in the European Area of Freedom, Security and Justice." Pp. 231–46 in *Radicalism and Terrorism in the 21st Century: Implications for Security*, edited by A. Sroka, F. Garrone, and R. Kumbrián. Frankfurt am Main, Germany:: Peter Lang AG. Retrieved (<https://www.jstor.org/stable/j.ctv2t4bgx.15>).
- European Parliament. 2018. "Terrorism in the EU: Terror Attacks, Deaths, and Arrests." Security European Parliament. Retrieved

(<http://www.europarl.europa.eu/news/en/headlines/security/20180703STO07125/terrorism-in-the-eu-terror-attacks-deaths-and-arrests>).

Germany Visa. 2019. "How to Get German Citizenship?" Retrieved (<https://www.germany-visa.org/german-citizenship/>).

Gesley, Jenny. 2016. "Refugee Law and Policy: Germany." Library of Congress. Retrieved (<https://www.loc.gov/law/help/refugee-law/germany.php>).

Global Detention Project. 2018. "Immigration Detention in Sweden." Retrieved (<https://www.globaldetentionproject.org/countries/europe/sweden>).

Global Legal Research Directorate Staff. 2014. "Family Reunification Laws." Library of Congress. Retrieved (<https://www.loc.gov/law/help/family-reunification>).

Haimei, Shen. 2011. "Inflow of International Immigrants Challenges China's Migration Policy." Brookings. Retrieved (<https://www.brookings.edu/opinions/inflow-of-international-immigrants-challenges-chinas-migration-policy/>).

Hofverberg, Elin. 2016. "Refugee Law and Policy: Sweden." Library of Congress. Retrieved (<https://www.loc.gov/law/help/refugee-law/sweden.php>).

Immigration in Rwanda. 2016. "National Migration Policy." Fortune of Africa. Retrieved (<https://fortuneofafrica.com/rwanda/rwanda-private-public-sector/immigration-in-rwanda/>).

Jellissen, Susan, and Fred M. Gottheil. 2013. "On the Utility of Security Fences along International Borders." *Defense & Security Analysis* 29(4):266–79. Retrieved (<https://doi.org/10.1080/14751798.2013.842707>).

Jintao, Hu. 2013. "Exit and Entry Administration Law of the People's Republic of China." Embassy of the People's Republic of China in the United States of America. Retrieved (<http://www.china-embassy.org/eng/visas/zyxx/t1055481.htm>).

Meyer, Amelia. 2010. "Immigration to Brazil." Brazil. Retrieved (<https://www.brazil.org.za/immigration-to-brazil.html>).

Ministry of Industry. 2001. "The Swedish Citizenship Act." Retrieved (<https://www.refworld.org/pdfid/420cadf64.pdf>).

- Mpirwa, Elisee. 2018. "Rwanda's Open Border Policy Comes into Force." *New Times*. Retrieved (<https://www.newtimes.co.rw/section/read/226777>).
- Office of the Historian. N.d.a. "The Immigration Act of 1924 (The Johnson-Reed Act)." Retrieved (<https://history.state.gov/milestones/1921-1936/immigration-act>).
- Office of the Historian. N.d.b. "The Immigration and Nationality Act of 1952 (The McCarran-Walter Act)." Retrieved (<https://history.state.gov/milestones/1945-1952/immigration-act>).
- Palmer, Edith. 2013. "Citizenship Pathways and Border Protection: Germany." Library of Congress. Retrieved (<https://www.loc.gov/law/help/citizenship-pathways/germany.php#Border>).
- Peters, Margaret E. 2014. "Open Trade, Closed Borders: Immigration Policy in the Era of Globalization; Appendix B: Coding the Immigration Policy Dataset." Yale University. Retrieved (https://static.cambridge.org/resource/id/urn:cambridge.org:id:binary:20170210061032227-0187:S0043887114000331:S0043887114000331_supp_mat.pdf).
- Republic of Rwanda. 2004. "Organic Law N° 29/2004 of 03/12/2004 on Rwandan Nationality Code." Retrieved (<https://www.refworld.org/docid/452cf1b74.html>).
- Rwanda: Law No. 17/99 of 1999 on Immigration and Emigration, 16 August 1999. Retrieved March 18, 2019 (<https://www.refworld.org/docid/452e3f714.html>).
- Simon-Davies, Joanne. 2018. "Population and Migration Statistics in Australia." Parliament of Australia. Retrieved (https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/rp/rp1819/Quick_Guides/PopulationStatistics).
- Soares, Eduardo. 2013. "Citizenship Pathways and Border Protection: Brazil." Library of Congress. Retrieved (<https://www.loc.gov/law/help/citizenship-pathways/brazil.php>).
- Swedish Migration Agency. 2019. "Work Permits Granted 2019." Retrieved (<https://www.migrationsverket.se/download/18.748d859516793fb65f9ce0/>).

1551688682902/Beviljade_arbetstillst%C3%A5nd_2019_-_Work_permits_granted_2019.pdf).

Trump, Donald. 2017. "Executive Order 13780 of March 6, 2017 (Protecting the Nation from Foreign Terrorist Entry into the United States." Retrieved (<https://www.whitehouse.gov/presidential-actions/presidential-proclamation-enhancing-vetting-capabilities-processes-detecting-attempted-entry-united-states-terrorists-public-safety-threats/>).

United Nations High Commissioner for Refugees (UNHCR). 2010. "1951 Convention Relating to the Status of Refugees and the 1967 Protocol Relating to the Status of Refugees." Retrieved (<https://www.unhcr.org/3b66c2aa10>).

UNHCR. 2018a. "Rwanda." Global Focus UNHCR. Retrieved (<http://reporting.unhcr.org/node/12530?y=2018#year>).

UNHCR. 2018b. "UNHCR Provides Cash Assistance to Returnees in Rwanda." Retrieved (<https://www.unhcr.org/rw/>).

United States Government. 2018. "Deportation." Retrieved (<https://www.usa.gov/deportation>).

U.S. Citizenship and Immigration Services. 2017. "SAVE History and Milestones." Retrieved (<https://www.uscis.gov/save/history-milestones>).

U.S. Congress. 1980. *Public Law 96-212- MAR. 17, 1980*. 96th Congress. Retrieved (<https://www.govinfo.gov/content/pkg/STATUTE-94/pdf/STATUTE-94-Pg102.pdf>).

U.S. Customs and Border Protection. 2018a. "U.S. Border Patrol Fiscal Year Staffins Statistics (FY 1992–2018)." Retrieved (<https://www.cbp.gov/sites/default/files/assets/documents/2019-Mar/Staffing%20FY1992-FY2018.pdf>).

Voss, Loren. 2018. "Choosing Words with Purpose: Framing Immigration and Refugee Issues as National Security Threats to Avoid Issues of Social Policy." *Yale Journal of International Affairs* 13:39–52.

Wachiaya, Catherine. 2019. "Seeking Safety in Rwanda, Somali Refugee Finds Opportunity and Love." UN Refugee Agency. Retrieved

(<https://www.unhcr.org/rw/14041-seeking-safety-in-rwanda-somali-refugee-finds-opportunity-and-love.html>).

Willis, Henry H., Joel B. Predd, Paul K. Davis, and Wayne P. Brown. 2010. "Contributions of Border Security to Drug Control, Counterterrorism, and Illegal Migration." Pp. 15–22 in *Measuring the Effectiveness of Border Security Between Ports-of-Entry*. Retrieved (<https://www.jstor.org/stable/10.7249/tr837dhs.12>).

World Data. 2017. "Asylum Applications and Refugees in Brazil." Retrieved (<https://www.worlddata.info/america/brazil/asylum.php>).

Zhang, Laney. 2015. "Citizenship Pathways and Border Protection: China." Library of Congress. Retrieved (<https://www.loc.gov/law/help/citizenship-pathways/china.php>).

Zhang, Laney. 2016. "Refugee Law and Policy: China." Library of Congress. Retrieved (<https://www.loc.gov/law/help/refugee-law/china.php>).

Appendix A

Terrorist Attacks 1970–2017 (Global Terrorism Database)

Year	AU	BR	CH	DE	RW	SE	US	Year	AU	BR	CH	DE	RW	SE	US
1970	1	6	0	0	0	1	469	1994	8	19	12	79	33	1	55
1971	1	3	0	0	0	2	247	1995	5	23	8	147	17	1	60
1972	8	3	0	0	0	3	68	1996	5	18	64	52	15	1	35
1973	2	5	0	0	0	0	58	1997	4	49	18	12	33	4	40
1974	1	0	0	0	0	0	94	1998	6	2	2	6	9	0	31
1975	0	0	0	0	0	1	149	1999	0	1	2	13	0	2	53
1976	0	5	0	0	0	0	105	2000	1	2	4	8	1	1	32
1977	0	1	0	0	0	0	130	2001	2	3	12	8	1	0	41
1978	2	5	0	0	0	1	87	2002	0	1	2	3	0	0	33
1979	2	6	0	0	0	1	69	2003	0	1	3	2	0	0	33
1980	6	19	0	0	0	0	67	2004	0	0	2	3	0	0	9
1981	1	11	0	0	0	0	74	2005	0	0	1	3	1	3	21
1982	2	4	0	0	0	0	78	2006	2	3	0	4	0	1	6
1983	0	8	0	0	0	1	44	2007	0	0	0	3	0	0	8
1984	0	5	0	0	0	0	63	2008	3	0	20	3	1	1	18
1985	0	1	0	0	0	0	39	2009	1	0	7	4	1	1	11
1986	2	3	0	0	0	3	49	2010	1	0	1	1	8	3	17
1987	0	1	0	0	0	0	34	2011	0	0	4	8	2	1	10
1988	3	2	0	0	0	0	27	2012	0	1	4	5	6	2	20
1989	2	5	3	0	0	3	42	2013	1	3	12	0	4	0	19
1990	0	7	1	0	0	6	32	2014	8	3	37	13	2	5	29

1991	4	24	1	65	2	6	30	2015	14	5	6	65	0	32	38
1992	4	23	5	156	18	12	32	2016	9	2	6	44	1	16	64
1993	0	0	0	0	0	0	0	2017	3	2	6	27	2	18	65

Appendix B

Country Policy Scores

	Australia	Brazil	China	Germany	Rwanda	Sweden	United States
Nationality	4	4	4	4	4	4	3
Skill/Income	1	2	2	2	1	3	2
Quota	1	5	5	5	5	5	1
Work Prohibitions	5	5	5	5	5	5	5
Family	3	4	3	2	2	2	3
Refugee	3	2	2	3	5	3	3
Asylum	4	2	2	4	5	4	4
Citizenship	4	4	3	4	5	4	4
Immigrant Rights	3	4	2	2	4	4	3
Deportation	4	3	2	3	3	5	3
Enforcement	2	2	1	4	4	4	1
Average Score	2.9	3.1	2.6	3.2	3.2	3.9	2.7

Table B.1. All Countries' Immigration Policy Scores

Note: Given that the score for work prohibitions was the same for every country, it has been removed from the data analysis because of zero variance.

Policy Overview and Preliminary Scores

Each year presented in the table represents the year a new policy was enacted. Boldface numbers represent the categories affected by the policy in that year.

	1951	1958	1994	2007	2014
Nationality	4	4	4	4	4
Skill/Income		1	1	1	1
Quota	1	1	1	1	1
Family			3	3	3
Refugee	3	3	3	3	3
Asylum	4	4	4	4	4
Citizenship				4	4
Immigrant Rights	3	3	3	3	3
Deportation		4	4	4	4
Enforcement		3	3	3	2
Average	3	2.87	2.89	3	2.9

Table B.2. Policy Scale Scores for Australia

	1937	1940	1951	1957	1965	1980	1981	1985	1993	1997	2011	2017
Nationality	4	4	4	4	4	4	4	4	4	4	4	4
Skill/Income						1	1	1	1	1	1	1
Quota	5	5	5	5	5	5	5	5	5	5	5	5
Family										4	4	4
Refugee			3	3	3	3	2	2	2	2	2	2
Asylum	2	2	2	2	2	2	2	2	2	2	2	2
Citizenship						4	4	4	4	4	4	4
Immigrant Rights	4	4	4	4	4	4	4	4	4	4	4	4
Deportation		3	3	3	3	3	3	3	3	3	3	3
Enforcement								2	2	2	2	2
Average	3.75	3.6	3.5	3.5	3.5	3.25	3.12	3	3	3.1	3.1	3.1

Table B.3. Policy Scale Scores for Brazil

	1951	1980	1985	2000	2004	2013
Nationality	4	4	4	4	4	4
Skill/Income			2	2	2	2
Quota	5	5	5	5	5	5
Family					3	3
Refugee	3	3	3	3	3	2
Asylum			2	2	2	2
Citizenship				3	3	3
Immigrant Rights	2	2	2	2	2	2
Deportation						2
Enforcement						
Average	3	3	2.7	2.75	2.78	2.6

Table B.4. Policy Scale Scores for China

	1913	1951	1985	1986	1990	1997	2001	2004	2008	2015	2017
Nationality	4	4	4	4	4	4	4	4	4	4	4
Skill/Income								2	2	2	2
Quota	5	5	5	5	5	5	5	5	5	5	5
Family								2	2	2	2
Refugee		3	3	3	3	3	3	2	2	2	2
Asylum										4	4
Citizenship	4	4	4	4	4	4	4	4	4	4	4
Immigrant Rights						2	2	2	2	2	2
Deportation							3	3	3	3	3
Enforcement			4	4	4	4	4	4	4	4	4
Average	4.3	4	4	4	4	3.67	3.57	3.11	3.11	3.2	3.2

Table B.5. Policy Scale Scores for Germany

	1999	2004	2005	2014
Nationality	4	4	4	4
Skill/Income			1	1
Quota	5	5	5	5

Family	2	2	2	2
Refugee	5	5	5	5
Asylum	-----	-----	-----	-----
Citizenship		4	4	4
Immigrant Rights				4
Deportation	3	3	3	3
Enforcement			4	4
Average	3.8	3.83	3.5	3.56

Table B.6. Policy Scale Scores for Rwanda

	1951	1982	1989	2001	2003	2005	2008	2010	2015	2016
Nationality	4	4	4	4	4	4	4	4	4	4
Skill/Income										
Quota	5	5	5	5	5	5	5	5	5	5
Family					2	2	2	2	2	2
Refugee	3	3	3	3	3	3	3	3	3	3
Asylum		4	4	4	4	4	4	4	4	4
Citizenship				5	5	5	5	5	5	5
Immigrant Rights		4	4	4	4	4	4	4	4	4
Deportation						5	5	5	5	5
Enforcement			4	4	4	4	4	4	4	4
Average	3.75	3.83	3.86	4	3.78	3.9	3.9	3.9	3.9	3.9

Table B.7. Policy Scale Scores for Sweden

	1924	1951	1952	1975	1980	1986	1990	1996	2001	2002	2006
Nationality			3	3	3	3	3	3	3	3	3
Skill/Income			2	2	2	2	2	2	2	2	2
Quota	1	1	1	1	1	1	1	1	1	1	1
Family							3	3	3	3	3
Refugee		3	3	3	3	3	3	3	3	3	3
Asylum								4	4	4	4
Citizenship			4	4	4	4	4	4	4	4	4

Immigrant Rights						3	3	3	3	3	3
Deportation								3	3	3	3
Enforcement										1	1
Average	1	2	2.6	2.6	2.6	2.67	2.71	2.89	2.89	2.7	2.7

Table B.8. Policy Scale Scores for the United States

Appendix C

Attacks on Countries Compared to Country Policies

		Attacks	Policy
Attacks	Pearson Correlation	1	-.086
	Sig. (2-tailed)		.560
	N	48	48
Policy	Pearson Correlation	-.086	1
	Sig. (2-tailed)	.560	
	N	48	48

Table C.1. Attacks vs. Policy in Australia

		Attacks	Policy
Attacks	Pearson Correlation	1	-.150
	Sig. (2-tailed)		.310
	N	48	48
Policy	Pearson Correlation	-.150	1
	Sig. (2-tailed)	.310	
	N	48	48

Table C.2. Attacks vs. Policy in Brazil

		Attacks	Policy
Attacks	Pearson Correlation	1	-.370**
	Sig. (2-tailed)		.010
	N	48	48
Policy	Pearson Correlation	-.370**	1
	Sig. (2-tailed)	.010	
	N	48	48

Table C.3. Attacks vs. Policy in China

		Attacks	Policy
Attacks	Pearson Correlation	1	-.023
	Sig. (2-tailed)		.875
	N	48	48
Policy	Pearson Correlation	-.023	1
	Sig. (2-tailed)	.875	
	N	48	48

Table C.4. Attacks vs. Policy in Germany

		Attacks	Policy
Attacks	Pearson Correlation	1	-.397
	Sig. (2-tailed)		.092
	N	48	48
Policy	Pearson Correlation	-.397	1
	Sig. (2-tailed)	.092	
	N	48	48

Table C.5. Attacks vs. Policy in Rwanda

		Attacks	Policy
Attacks	Pearson Correlation	1	.260
	Sig. (2-tailed)		.075
	N	48	48
Policy	Pearson Correlation	.260	1
	Sig. (2-tailed)	.075	
	N	48	48

Table C.6. Attacks vs. Policy in Sweden

		Attacks	Policy
Attacks	Pearson Correlation	1	-.361*
	Sig. (2-tailed)		.012
	N	48	48
Policy	Pearson Correlation	-.361*	1
	Sig. (2-tailed)	.012	
	N	48	48

Table C.7. Attacks vs. Policy in the United States

		Attacks	Policy
Attacks	Pearson Correlation	1	-.221**
	Sig. (2-tailed)		.000
	N	306	306
Policy	Pearson Correlation	-.221**	1
	Sig. (2-tailed)	.000	
	N	306	306

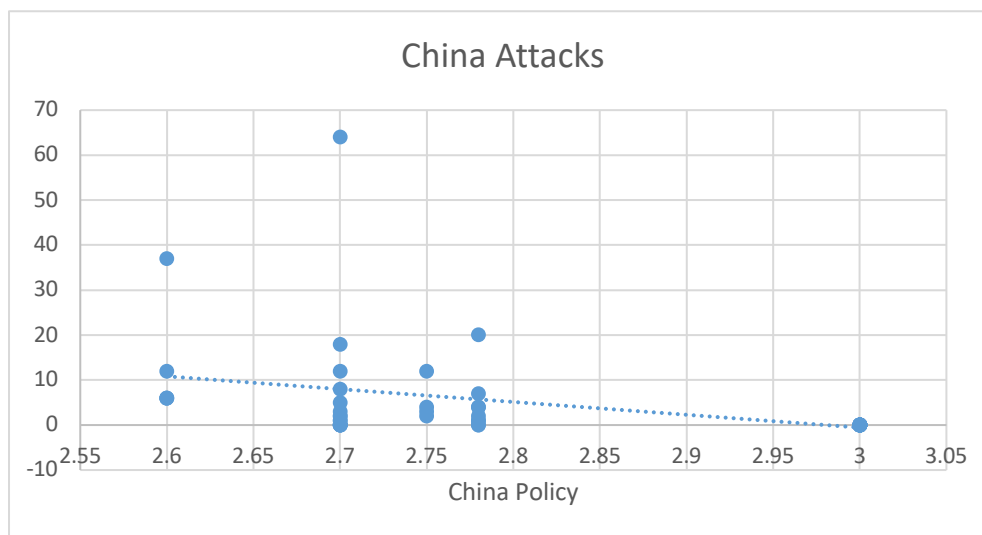
Table C.8. Total Attacks vs. Policy for All Countries

Appendix D

Country Curve Estimations and Graphs

Model Summary and Parameter Estimates							
Dependent Variable: China Attacks							
Model Summary						Parameter Estimates	
Equation	R-Square	F	Df1	Df2	Sig.	Constant	B1
Linear	.137	7.275	1	46	.010	84.886	-28.483
Independent Variable: China Policy							

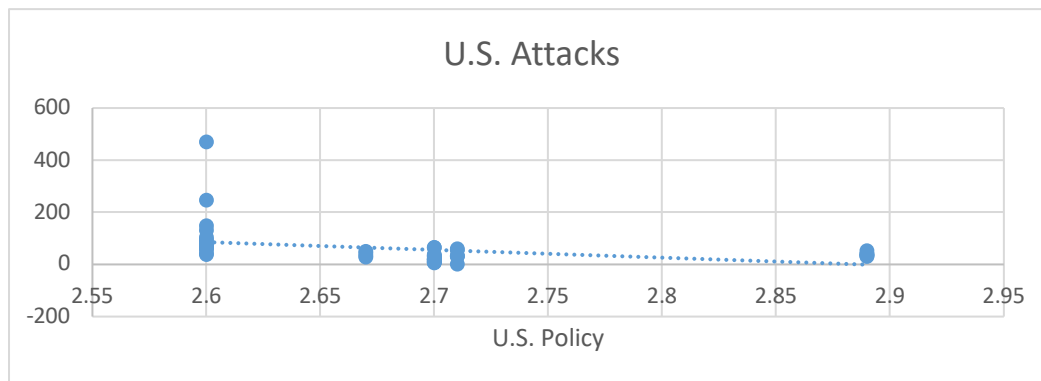
Table D.1. Curve Estimation Data for China



Graph D.1. Curve Estimation for China

Model Summary and Parameter Estimates							
Dependent Variable: U.S. Attacks							
Model Summary						Parameter Estimates	
Equation	R-Square	F	Df1	Df2	Sig.	Constant	B1
Linear	.130	6.873	1	46	.012	860.275	-297.941
Independent Variable: U.S. Policy							

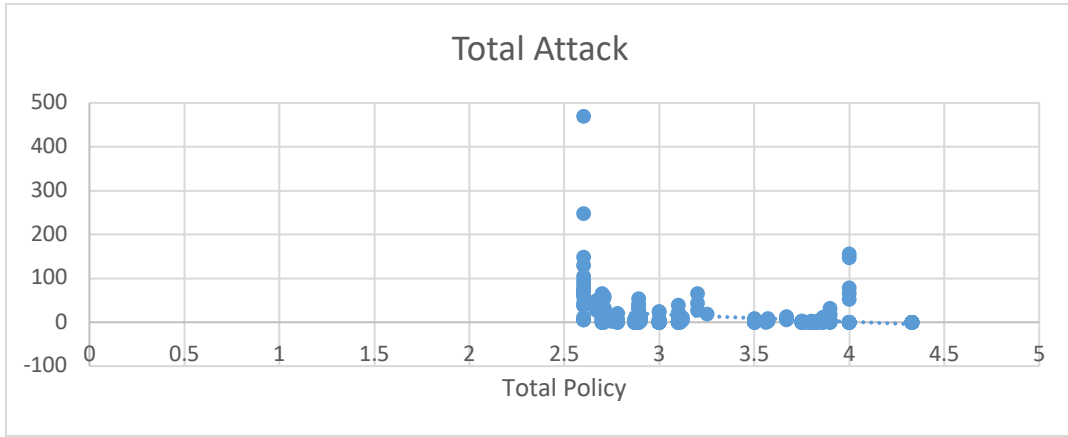
Table D.2. Curve Estimation Data for the United States



Graph D.2. Curve Estimation for the United States

Model Summary and Parameter Estimates							
Dependent Variable: Total Attacks							
Model Summary						Parameter Estimates	
Equation	R-Square	F	Df1	Df2	Sig.	Constant	B1
Linear	.049	15.635	1	304	.000	68.064	-16.678
Independent Variable: Total Policy							

Table D.3. Total Curve Estimation Data



Graph D.3. Total Curve Estimation

THE MOTIVATIONS AND PERCEIVED BENEFITS OF STUDENT PARTICIPATION IN DANCE MARATHON

EMILY G. NETTESHEIM, BUTLER UNIVERSITY

MENTOR: CHAD KNODERER

Background

In modern times, demand for nonprofit volunteers frequently exceeds supply. The National Center for Charitable Statistics states that more than 1.5 million nonprofit organizations were registered with the IRS in 2015, a 10.4% growth since 2005 (McKeever, 2018). Volunteer and donation rates are not only failing to keep pace with this growth but have experienced declines of almost 4% and 11%, respectively (Grimm & Dietz, 2018). For this reason, research on the motivation of volunteers is more important than ever (Francis, 2011). The U.S. Bureau of Labor Statistics (BLS; 2015) reports that the national volunteer rate is declining, with only about 1 in 4 Americans volunteering at least once in a calendar year. According to the University of Maryland's Do Good Institute, the likelihood of volunteering decreases by almost 8% as individuals develop from adolescence into young adulthood (Grimm & Dietz, 2018). Despite almost 77.5% of college first years rating "helping others" as "essential" or "very important" (Eagan et al., 2017), volunteer rates were lowest among young adults aged 20–24 (BLS, 2015), with fewer than 1 in 5 volunteering annually. Young adults are critical for organizations' expansion and improvement, as it can be thought that those who help now will lead in the future (Francis, 2011).

Although definitions vary slightly throughout the literature, in this study, a young adult is defined as someone aged 19–24. Additionally, the majority of the studies cited have population samples comprised of the Millennial generation. The terms "young adults" and "Millennials" will thus be used interchangeably throughout this paper.

In 2017, annual individual giving in the United States totaled \$286.7 billion, accounting for 70% of all giving nationally (Giving USA, 2018). Annual giving has continued to grow in the past three years, and this growth trend and the magnitude of individual giving demonstrates the value that society places on charity. Although Millennials make up 25.9% of the population and account for only 11% of total charitable giving in the United States, 84% of Millennials give to charitable

organizations annually (Rovner, 2013). The cohort of young adult volunteers and donors, although important, is frequently overlooked in studies aimed to further understand motivations behind volunteering. Additionally, the explanation for low participation in volunteer efforts but high participation in fundraising or donating among young adults remains not fully characterized or understood.

University students are an even more valuable subcategory of this demographic, as volunteering is often closely aligned with future career benefits, and these students often have more free time than their fully employed peers (Berger & Milem, 2002; Sundeen, Raskoff, & Garcia, 2007). Over the past 30 years, there has been a change in how young adult college students spend their time. Time spent by college students on academics has decreased, while time spent in leisure, extracurricular activities, and employment have increased (Babcock & Marks, 2011). With this rise in free time, it is increasingly interesting and important to understand the motivations behind how students allocate their time. Without an understanding of student motivation to participate in philanthropy, it is virtually impossible to reverse the decline in participation.

Miracle Network Dance Marathon

One of the most successful examples of student philanthropy is the Dance Marathon. The Miracle Network Dance Marathon movement began with a single dance marathon at Indiana University (IU) in 1991. The original marathon was held in memory of Ryan White, who passed away from HIV/AIDS before he was to start college at IU. White often spoke out and advocated for HIV/AIDS education. The Dance Marathon (DM) organization was started by his friends, in response to their promise to keep his memory alive, and was to benefit Riley Hospital for Children, where White received treatment.

The first marathon raised \$10,900, but beyond that, it started a movement that continues today. Three years after the inaugural marathon, the Children's Miracle Network Hospital (CMN) organization approached the Indiana University Dance Marathon (IUDM) and its founder, Jill Stewart, and asked for permission to expand the IUDM fundraising model to universities across North America. Today, the Miracle Network Dance Marathon movement spans North America, with more than 350 participating universities benefitting hundreds of hospitals across the country. The typical dance marathon engages students year-round to raise funds and awareness for their local CMN hospitals. The year culminates with a "dance marathon" event in which students get to meet patient families treated at their local hospital, participate in games and dancing, enjoy entertainment, and reveal their

annual fundraising total. Each DM organization is entirely student-run, and 100% of all funds raised go directly to a local CMN hospital (E. Phipps, personal communication, April 21, 2017).

All of the DMs that were part of this study raise money for Riley Hospital for Children. Riley serves patients from all 92 Indiana counties, and children from all over the world come to Riley to receive treatment. Nationally ranked in all 10 pediatric specialties, Riley is recognized by *U.S. News and World Report* as one of the nation's top children's hospitals. Riley Dance Marathon is the largest and highest-fundraising CMN DM program, with more than 24% of CMN's funds raised by Riley DMs. Together, Riley's 80 DMs raised 6.5 million dollars in the 2015–2016 school year, with more than 15,000 participants (E. Phipps, personal communication, April 21, 2017).

Millennial Motivations

Based on the demographic age and class standing of a typical undergraduate student, most participants in this study at the time of data collection were born between 1994 and 1998. This makes this cohort on the edge of being categorized as Millennials or as a part of early Generation Z. Further, the majority of student participants over the history of Dance Marathon have been Millennials.

Millennials and their intrinsic motivations have been studied at great length. In general, they participate in philanthropy because of a commitment to their community and belief in their ability to make a change. Passion for the cause is their primary motivator. They are initially motivated to give by engaging storytelling and by seeing the long-term effects of their gifts (Feldmann, 2017).

As a whole, the nonprofit sector today is facing fundamental issues in recruiting and maintaining sufficient volunteer staff and funding (Francis, 2011). The Children's Miracle Network Dance Marathon movement, however, has attracted more than one million active student participants nationwide, and it raised close to \$27 million last year as one of the fastest peer-to-peer fundraising campaigns in the nation (Meardon, 2018). With the business of college life, an organization that has grown each year to engage the massive current levels of participation and success that CMN does *must* provide some unique reward or benefit to participants. The objective of this study is to characterize the motivations and perceived benefit of young adult college student involvement in DMs.

Methodology

Measurements

A mixed-methods approach was used to examine participants' perceptions and to measure and analyze relationships. Qualtrics Survey software was used to build and distribute the survey. The survey consisted of 22 questions divided into four categories titled Demographics, What is involvement with Dance Marathon, The DM impact, and Perceived benefit of involvement with DM. The demographics section consisted of multiple-choice questions about gender, year in school, and school. Participants were also asked about involvement with DM before high school, and their participation level each year that they have been involved with DM. Free-response questions gauged first impressions of DM, how other people described DM to them, and expectations before participation, used to categorize how initial expectations influenced participant motivations.

To qualify the motivations and perceived benefits of involvement in DM, it was necessary to define DM involvement for the sample group. The second section of the survey included questions about the amount of time spent fundraising, amount of time per week committed to DM, and personal fundraising goals and actual totals. Participants were then asked 20 of the 30 Likert-scale questions identified in Clary and Snyder's (1999) Volunteer Functions Inventory (VFI), which, with more than 1,200 citations, has become a gold standard for understanding volunteer motivations. Questions were limited to increase the response rate. Participants were asked to rank their agreement to multiple statements that would reveal one of the six motivation types defined by the VFI, including "I am concerned about those less fortunate than myself" (Values), "Participating in DM makes me feel important" (Enhancement), "Participating in DM allows me to gain a new perspective on things" (Understanding), "I participated in DM to make my resume look good" (Career), and "I've made new friends by participating in DM" (Social). Responses for each motivation were combined to form a cumulative score for each participant. Participants received positive values for questions in which they were in agreement (somewhat agree = 1, agree = 2, and strongly agree = 3), 0 points for "neither agree nor disagree," and negative points for those with which they were in disagreement (somewhat disagree = -1, disagree = -2, strongly disagree = -3). If a statement was skipped or was marked "NA/Prefer not to answer," the participant received no score for the entire category in which the statement belonged. Scores were divided by the possible number of questions per category of motivation. Average scores for each category

were then reported for the sample. VFI questions corresponding to the protective motivation were left off this section of the survey unintentionally, so only five of the six motivations are reported.

Participants were also asked to rank their motivations for participating in DM on a scale from 1 to 6, with 1 indicating their top motivator. They were offered the following choices based on themes from the VFI: Values, Protective, Enhancement, Understanding, Career, and Social. The motivations were defined in the following way:

- *Values*: express and act on humanitarian or altruistic tendencies
- *Protective*: protect the ego from negative features of the self and negative feelings
- *Enhancement*: develop and expand the positive aspects of one's ego
- *Understanding*: learn and practice life knowledge, skills, and abilities
- *Career*: develop, prepare, and maintain career-related skills
- *Social*: be with friends and do something that important others view favorably

Finally, the survey included a series of free-response questions asking participants to define how they have matured, what skills they have gained, what makes DM different, and their primary motivation in one word. Free responses were analyzed using thematic analysis, a method used to find repeated patterns within the data set. This study used the six phases detailed by Braun and Clarke (2006) to complete thematic analysis: become familiar with data, generate initial codes, search for themes, review themes, name themes, and produce report. Each response could be categorized in multiple themes if applicable.

Statistical analysis was conducted using Statistical Package for Social Sciences version 23.0 (SPSS v23.0). Continuous data were described using mean and standard deviation (SD) for variables considered to be normally distributed, and median and interquartile range (IQR) for variables considered to be non-normally distributed. Groupwise demographic and respondent characteristics were compared using independent sample two-tailed t-tests, chi-square analyses, or Mann-Whitney tests for nonparametric data. P values < 0.05 were considered to be statistically significant. The study was given exempt approval from the university's institutional review board.

Sample

The survey was distributed to three IUDM programs. E-mail lists of registered DM participants were obtained from two universities and invitations, and participation reminders were delivered by e-mail. The survey was distributed to the third university by the organization president through an anonymous link because of the school's student privacy policies. School A is a state-assisted residential university of 17,000 undergraduate students. School A Dance Marathon is 10 years old and currently stands in the second-highest fundraising bracket recognized by CMN DM staff: \$450,000–\$999,999. School B is a private, liberal arts, residential university of 4,500 undergraduate students. School B's Dance Marathon was the second DM program in Indiana after the original IUDM. At 18 years since it was founded, the program is in the middle fundraising bracket (\$250,000–\$449,999) and was recognized in CMN's top fundraising schools per capita. School C is a state-assisted university of 22,000 students, with 89% of students commuting to campus. School C Dance Marathon is celebrating its 17th year and fundraises in the second-highest fundraising bracket: \$450,000–\$999,999. Because surveys were distributed by anonymous links, it was not possible to send follow-up e-mails to participants from School C. This may have resulted in lower response rates.

Results

Sample

The survey was distributed to 1492 participants in total. There were 161 respondents, for an 11% response rate. The majority of study participants were female (85%). Participants were more diverse in their class year, with representation from all grades. All participant types were represented, and at relative frequencies representative of the population. General members and committee members participated at the highest rates. The majority of respondents became involved with DM for the first time in college. General demographics are described in Table 1.

Participant Demographics		
Gender		
	Participants (n)	Percent (%)
Female	136	85.0
Year		
First Year	42	26.1
Sophomore	52	32.3
Junior	32	19.9
Senior	29	18.0
Graduate School	2	1.2
Other	4	2.5
Participant Type		
General Member	78	48.4
Committee Member	92	57.1
Mid-level Leadership	27	16.8
Executive Board	29	18.0
High School Dance Marathon Participant		
Yes	37	23.0
No	124	77.0

Table 1. Cumulative Participant Demographics from Schools A–C.

What is Involvement in Dance Marathon?

For survey participants, DM involved a weekly time commitment of about 1 hour for an average of 4 to 5 months (Table 2). It also was defined by significant fundraising commitment. On average, participants set fundraising goals of \$741.22 and actually fundraised \$734.84 (Table 2).

	Mean
Fundraising Time (months)	4.50
Weekly Commitment (hours)	1.00
Fundraising Goal (USD)	\$741.22
Actual Fundraising Total (USD)	\$734.84

Table 2. Dance Marathon Involvement

Motivations to be Involved

In response to a free-response question asking what about DM had originally interested participants, three themes emerged: DM supported a good cause (Values, 71.2%), their friends were doing it or it was a way to make friends (Social, 39.6%), and the networking or resume-building potential (Career, 15.3%; Table 3).

	Frequency (<i>n</i> = 111)	Percent	95% CI
Values	79	71.2	62.8%–79.6%
Social	44	39.6	30.5%–48.7%
Career	17	15.3	8.6%–22.0%

Table 3. Initial Motivation for Involvement with Dance Marathon

Many participants noted two of the three themes simultaneously, as demonstrated by the following participant responses:

I really wanted to participate to help out kids and have fun with friends.

A lot of my friends were doing it and also I wanted to join a club that focused on making a positive difference.

I have always had a passion for helping kids and I have always aspired to go into the medical pediatrics field. I became interested in DM because it gives me the opportunity to make a huge impact on those kids' lives even before I have the schooling and training to work with them.

Major themes of respondents' first impressions of DM before becoming involved with the organization included a unique organization atmosphere noted specifically as fun, inspiring, and/or passionate. One participant summarized general themes among participating, saying, "Dance Marathon was full of passionate people who cared about something that was pertinent in my life, Riley Hospital for Children. The exec team was great and made me fired up to raise money FTK [for the kids]!" Participants also noticed the impact of the organization,

the large reach of DM across campus and the way it united the campus, and the excellent execution of events and meetings (Table 4).

	Frequency (<i>n</i> = 133)	Percent (%)	95% CI
Organization Atmosphere	93	69.9	62.1%–77.7%
Organization Impact	59	44.4	36.0%–52.8%
Organization Reach	44	33.1	25.1%–41.1%
Organization Execution	10	7.5	3.0%–12.0%

Table 4. *First Impressions of Dance Marathon*

When using the VFI questionnaire, respondents most experienced the Values function (median = 3), Understanding function (median = 2.17), and Social function (median = 2), as shown in Table 5. The maximum score was 3. Median scores for each statement are reported in Table 6.

	Median	IQR
Values	3.00	2.67–3.00
Enhancement	1.67	1.00–3.00
Understanding	2.17	1.67–3.00
Career	1.50	0.50–2.25
Social	2.00	1.50–2.75

Table 5. *Motivations for Involvement with Dance Marathon (VFI Questionnaire)*

Statement	Median Agreement Score	IQR
I am concerned about those less fortunate than myself. (Values)	3.0	2.0–3.0
I feel compassion toward people in need. (Values)	3.0	3.0–3.0
I feel it is important to help others. (Values)	3.0	3.0–3.0
Participating in DM makes me feel important. (Enhancement)	2.0	1.0–3.0
Participating in DM increases my self-esteem. (Enhancement)	2.0	1.0–3.0
Participating in DM makes me feel needed. (Enhancement)	2.0	1.0–3.0
Participating in DM allows me to gain a new perspective on things. (Understanding)	3.0	2.0–3.0
By participating in DM, I learned how to interact and communicate with a variety of people. (Understanding)	2.0	1.0–3.0
By participating in DM, I explored my strengths. (Understanding)	2.0	1.0–3.0
Participating in DM helped me make new contacts that might help my business or career. (Career)	2.0	0.0–3.0
Participating in DM allowed me to explore different career options. (Career)	1.0	0.0–3.0
Participating in DM will help me succeed in my chosen profession. (Career)	2.0	0.0–3.0

I participated in DM to make my resume look good. (Career)	2.0	0.0-3.0
My friends participate in DM. (Social)	2.0	2.0-3.0
People I am close to wanted me to participate in DM. (Social)	2.0	1.0-3.0
People I am close to place a high value on service and philanthropy. (Social)	2.0	2.0-3.0
I've made new friends by participating in DM. (Social)	2.0	1.3-3.0

Table 6. Modified VFI Scores (maximum agreement score = 3.0)

While all other questions allowed participants to combine multiple motivators into their responses, the final question required participants to summarize their motivations into one word or phrase. The majority of respondents (86.9%) answered this question with a word about the cause or the kids at Riley Hospital for Children. The other themes were mentioned at frequencies of less than 10% (Table 7). Responses mentioning an innate or external responsibility to participate were categorized together under the requirement theme.

Motivation	Frequency (n = 107)	Percent (%)	95% CI
Cause	93	86.9	80.5%–93.3%
Requirement	7	6.5	1.8%–11.2%
Social	7	6.5	1.8%–11.2%
Positive Emotions	6	5.6	1.2%–10.0%
Personal Benefit	3	2.8	0.0%–5.9%

Table 7. Primary Motivations for Involvement with Dance Marathon

Perceived Benefits of Participation

There was general agreement among respondents that they gained new skills (93.6%) and matured or developed (86.4%) as a result of involvement with DM. More specifically, participants reported developing skills and aptitudes in three general categories: social skills, career-related skills, and emotional intelligence (Table 8). Some statements about skills are shown below.

I have learned valuable communication skills from being on a committee. I have also learned persistence through our fundraising days. It can get hard to keep getting turned down when asking for donations, but you develop that never-give-up attitude because you are so passionate about the cause.

I have gained increased skills in communication and skills in planning during my time especially as a committee member. I have also learned skills in developing meaningful relationships as well. This organization really gives you the opportunity to connect with people over something amazing beyond superficial connections.

Both my ability to communicate and my ability to empathize with others have improved.

[I have improved at] working as a team, fundraising, motivational speaking, working with corporations.

Skill	Frequency (<i>n</i> = 110)	Percent (%)	95% CI
Any Skills	103	93.6	89.0%–98.2%
Social Skills	49	44.5	35.2%–53.8%
Career-Related Skills	44	42.7	33.5%–51.9%
Emotional Intelligence	31	30.1	21.5%–38.7%

Table 8. Skills Developed through Involvement with Dance Marathon

Respondents noted improved emotional intelligence, development of transferable aptitudes, and improved life outlook or gratitude for their health or lives (Table 9). Transferable aptitudes mentioned included leadership, confidence, creativity, and communication skills. The impact of this development is best understood through the following direct quotes:

I believe I now have a different outlook on life. I never take being healthy for granted. I am a more positive individual. I wake up every morning thankful and I say prayers for those who do not have the opportunity to wake up in the comforts of their own bed.

I feel like I have heard stories and saw videos that have shown me that life could be much worse. I have learned to complain less and to live more.

My communication skills have significantly developed thanks to DM. By constantly fundraising, I become comfortable talking/approaching strangers, developing passion, and becoming more confident in who I am and my purpose for this world.

Development	Frequency (<i>n</i> = 108)	Percent %	95% CI
Any Development	95	86.4	79.9%–92.9%
Emotional Intelligence	49	44.5	35.1%–53.9%
Transferable Aptitudes	31	28.2	19.7%–36.7%
Improved Outlook/Gratitude	29	26.4	18.1%–34.7%

Table 9. Developments or Maturation through Involvement with Dance Marathon

What Makes Dance Marathon Different from other Organizations?

When participants were asked what made DM different from other organizations, many respondents (58.3%) mentioned the large impact the organization can have, as well as being able to directly see that impact (Table 10).

For example, one participant stated, “It is an all-in or all-out thing. If you choose to participate, you have to be fully committed and all FTK. We also truly make an impact, and by interacting with all of the Riley families, we can really see that.”

Differences	Frequency (<i>n</i> = 108)	Percent (%)	95% CI
Impact	63	58.3	49.0%–67.6%
Community	57	52.9	43.5%–62.3%
Passion	39	36.1	27.0%–45.2%
Longevity	11	10.2	4.5%–15.9%

Table 10. Major Differences between Dance Marathon and Other Organizations

Another major theme was the inclusivity and community aspect of the organization (52.8%):

Dance marathon accepts everyone for who they are, and we’re all a bunch of people with one really important goal.

It has a better sense of joy and a bigger internal result than any other organization I am in. It is more of a family than an organization. A family that fights, disagrees, cries together, but in the end, make each other better and love always.

Finally, participants mentioned the energy and passion present (36.1%). For example, one participant stated, “I truly believe that Dance Marathon is different from others because of the passion level that everyone brings to the table. It shines through more than anything I have ever seen.”

Discussion

In general, the study sample was representative of the DM population. Most DM programs nationally are female-dominated. The sample had a moderate involvement level demonstrating a significant time commitment and effort in fundraising. This level of commitment is consistent with the drastic differences I noticed between DM involvement and other nonprofit involvement. The effort put

forth is significant enough to require a degree of prioritization that demands the intrinsic and extrinsic motivations that I was interested in studying.

All measures characterizing types of motivations to participate reveal that DM appeals to all different kinds of volunteer functions simultaneously. Most closely aligned to the DM model are the Values, Understanding, and Social functions. This demonstrates that most DM participants in this sample participate to express or act on important values, to learn more about the world or exercise skills that are often unused, or to strengthen social relationships (Francis, 2011). In other questions revealing motivations, participants usually mentioned more than one motivation type. When asked to choose their primary motivation to participate, however, the overwhelming majority indicated the cause or impact on the cause. Further, most participants used the program's national slogan, "For The Kids," or "FTK."

Most participants reported that they developed skills or matured as a result of participation, revealing that DM programs are able to massively influence not only the cause but also participants themselves. Interestingly, only about 15% of participants mentioned desiring these developments in their original interest in DM, implying that personal benefit is usually not a motivator to participate, although it is an added benefit.

The differences noticed by participants between DM and other organizations align closely with what is known about Millennials' motivations. All DM programs surveyed include families affected by the hospital in their event. Participants can meet families and directly see the fruits of their efforts. More, with inclusive environments and relationship building, communities can form. Previous studies demonstrate that Millennials feel a responsibility to help the communities to which they belong.

It is not surprising that an organization structure created by Millennials and sustained by Millennials is able to attract and retain their peers at rates superior to those of other nonprofit organizations. The attractiveness and success of DM programs can be applied to recruitment and retention within the nonprofit sector. First impressions are critical. Using enthusiastic and passionate recruiters could be successful at creating initial engagement and developing interest in college students. Desired outcomes must be specific, clear, and visible when possible. Finally, with a calendar and an environment that fosters the creation of community through inclusivity, familiarity, and accountability, Millennial participants are more likely to feel a responsibility to the cause.

Limitations

Because some DM programs consider their participants donors, confidentiality and donor privacy rules limited recruitment to this study. Including programs from other hospital markets could reveal different findings. Riley Hospital and Dance Marathon are household names for many in Indiana, and there may be important differences between Indiana DM participants and DM participants across North America.

The bulk of the data in this study was taken from a thematic analysis of free-response questions. All responses were analyzed by only one researcher. Additionally, because the questions were open-ended, it is possible that participants experienced different developments or motivations that they did not articulate.

The missing data from the protective section of the VFI within the DM-impact section limited analysis of the consistency between participant responses and the overall analysis of sample motivations. Moreover, participants were asked to rank their motivations from 1 to 6, which was difficult to analyze collectively; only primary motivations (those marked 1) were able to be analyzed.

Further Directions

To date, no other studies have been published on the phenomenon that is the success of Dance Marathon. A larger sample size including a wider variety of program sizes from across the country could help better characterization of DM participants' motivations. Many of the free-response questions could be made multiple-choice after this initial sampling, hopefully increasing response rates and completion rates. Finally, the decrease in completion time achieved by reducing the number of free-response questions could allow for the complete VFI to be used.

Conclusion

Despite the overwhelming agreement that participants *do* benefit as a result of participation with DM, participants do not seem to be driven by these perceived benefits. College students' primary motivations to participate are altruistic values and the cause itself: Riley Hospital for Children. The DM model includes aspects that align with what is known about Millennials' motivations to volunteer. Continuing to better understand the motivations of volunteers and donors in the nonprofit sector is critical for the sector to survive. Better categorizing motivations

to participate in DM and Dance Marathon's attractiveness for the Millennial generation could lead to profitable applications for other nonprofit companies.

References

- Babcock, P., & Marks, M. (2011). The falling time cost of college: Evidence from half a century of time use data. *Review of Economics & Statistics*, 93(2), 467–478.
- Berger, J. B., & Milem, J. F. (2002). The impact of community service involvement on three measures of undergraduate self-concept. *NASPA Journal*, 40(1), 85–103.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 2006(3), 77–101. Retrieved from <https://doi.org/10.1191/1478088706qp063oa>
- Clary, E. G., & Snyder, M. (1999). The motivations to volunteer: Theoretical and practical considerations. *Current Directions in Psychological Science*, 8(5), 156–159. Retrieved from <https://doi.org/10.1111/1467-8721.00037>
- Eagan, K., Stolzenberg, E. B., Zimmerman, H. B., Aragon, M. C., Sayson, H. W., & Rios-Aguilar, C. (2017). *The American freshman: National norms for fall 2000*. Los Angeles: Higher Education Research Institute, University of California, Los Angeles Graduate School of Education and Information.
- Feldmann, D. (2017). *Year in review: An invigorated generation for causes and social issues*. TheMillennialImpact.com
- Francis, J. (2011). The functions and norms that drive university student volunteering. *International Journal of Nonprofit and Voluntary Sector Marketing*, 16(1), 1–12.
- Giving USA. (2018). *The annual report on philanthropy for the year 2017*. Bloomington: Indiana University, Lilly Family School of Philanthropy.
- Grimm, R., & Dietz, N. (2018). *Good intentions, gap in action: The challenge of translating youth's high interest in doing good into civic engagement*. College Park: University of Maryland Do Good Institute.
- McKeever, B. (2018). *The nonprofit sector in brief 2018*. Washington, DC: Urban Institute, National Center for Charitable Statistics.

- Meardon, E. (2018). *Dance Marathon ranked #14, fastest growing in peer-to-peer top 3—Children's Miracle Network Hospitals*.
ChildrensMiracleNetworkHospitals.org.
- Rovner, M. (2013). *The next generation of American giving: The charitable habits of Generations Y, X, Baby Boomers, and Matures*. Charleston, SC: Blackbaud Institute.
- Sundeen, R. A., Raskoff, S. A., & Garcia, M. C. (2007). Differences in perceived barriers to volunteering to formal organizations. *Nonprofit Management and Leadership*, 17(3), 279–300.
- U.S. Bureau of Labor Statistics. (2015). Volunteering and civic engagement. *Volunteering in the United States*.

A MATTER OF PERSPECTIVE: REPORTAGE STYLE IN DISTRICT 9 (2009)

M. MERT ÖRSLER, BILKENT UNIVERSITY
MENTOR: COLLEEN KENNEDY-KARPAT

Abstract

District 9 (2009) demonstrates an intriguing exemplar of contemporary science-fiction filmmaking by drawing on interesting aesthetic strategies, also extended to the narrative. This essay explores the allegory and its broader resonance in *District 9*, which uses remediation and a subcategory of intertextuality to unfold its meanings. These aesthetic strategies unpack the use of reportage rhetoric that critiques specific news media practices connected to a societal illness: racism. The strategies reflected in the narrative also play an essential role in the film's marking of an ideologically significant departure from the convention in the genre. The aesthetic strategies and its extension thus constitute the essence of this discussion of *District 9*.

Key words: film, genre, science fiction, news media

“Realities of working-class life are reorganized, reconstructed and reshaped by the way they are represented.”

—Stuart Hall, *Notes on Deconstructing 'the Popular'*

As a genre, science fiction generally contains a significant degree of movie spectacles, producing films appreciated for both their immersive stories and their spectacular images. They also depict their own metaphorical “world” whose logic points to social criticism. *District 9* (2009) is an example of this sci-fi social criticism, creating an allegory where humans live on Earth alongside an alien population in ways that echo a persistent social issue: racism. Set in South Africa, known for its history of extreme systemic racism called apartheid, the film figures its aliens as stand-ins for people of color. What is unique about *District 9*, however, is less its use of science fiction to critique a social ill than the fact that it achieves

this by drawing on the aesthetics of documentary or, rather, mockumentary at key points in the narrative. This essay will discuss how reportage style makes meaning in *District 9* and, in this sense, the relationship between its use and the film's marking of an ideologically significant departure from established convention in the genre.

Reportage Style: Aim and Perspective

Reportage style complicates narration and even the foundational notion of diegesis. Do these handheld-camera movements, voice-overs, and graphic elements resembling a news broadcast function as fiction within the diegesis of the film, or might they be used to present "facts" that are (also) true outside it? Reportage style appears many times throughout the film; however, the reports in the first five minutes of the film offer key exposition to introduce main characters, conflict, and setting. The tone of the reportage from the beginning serves a dual purpose: it helps create the film's xenophobic atmosphere, and it increases the verisimilitude of science fiction by drawing on mockumentary aesthetics. For Cynthia Miller (2012, p. 16), mockumentaries create nuanced narratives in which rueful humor coexists with subtle sociocultural critique about mundane reality. In other words, discomfort is the mockumentary's central tool for confronting the conventions of everyday life. In the filmic world of *District 9*, reportage style critically comments on how mass media presents a distorted reality to its audience.

Reportage style represents the world of the diegesis both to spectators of the film and to the characters within its fictional world. In this regard, it is representation twice over, reframing a diegesis to emphasize its own presumed facts, and manipulating the truth using its own formal conventions for both characters and spectators. This multilayered mediation works as if the "mass-mediated" perspective of characters overlaps with the perspective of spectators. Thus, due to the doubling, spectators of the film are simultaneously exposed to the same represented perspective of the characters.

The film's first act mocks the news media by exaggerating how the news media mediates the facts around it. In this regard, it is not new to link the news with the portrayals of ideological biases, which are even occasionally prioritized. The reportage sequences ironically resemble daily news in their content and use of visual convention, thus enhancing the verisimilitude. This reportage style in *District 9* can be defined characteristically as remediation, which is "the representation of one medium in another" (Bolter & Grusin, 2000, p. 45). The conventional form of televised news is ultimately incorporated into the narrative

film. Even more specifically, this use of pseudo-intertextual references can be called mendacious intertextuality, where an intertext—in this case, the news reportage—is crafted to resemble a separate text but exists only within the framework of the supertext and has no separate existence of its own (Harries, 2000, p. 28). Remediation thus allies with intertextual influences to make a social commentary on the specific real-life issue of ideological news.

Mass-communication scholar Teun A. van Dijk argues that the news is a prominent avenue for “convey[ing], enact[ing] and confirm[ing]” racism, and *District 9* uses the reportage style to underscore and critique this aspect of the news media (in Ballesteros, 2015, p. 11). The reportages are embellished with the bulletin crawl and logos in the style of cable TV news channels, a formal construction of verisimilitude. The first reportage within the first act [04:29–04:35] has its spot: “alien weapons caches seized” with the subtitle “alien crime rises” (Figure 1). The tone reveals anti-alien bias, showing two aliens putting their hands up without any trouble, while the news insists on referring to the aliens as career criminals. While a policeman treats one of them harshly, the newscaster implies that *District 9*, where the aliens of the city reside, is a troublesome place. That is, here, being an alien is directly associated with being a troublemaker or even a criminal. This sort of presupposed association indicates how the news can discriminate. Racism in the remediated intertext shows how the news can be ideologically biased; hence, the film critically comments on the xenophobic tune of news media, especially when the matter is political.



Figure 1. The news treats two aliens as convicted criminals, despite no convincing criminal evidence (Jackson & Blomkamp, 2009).

From a more political-economy perspective, all media, including journalism, is embedded in power relations. Here, the film's fictional, government-linked technology firm Multi-National United, abbreviated MNU, illustrates its operations within the film world of *District 9*. The MNU is officially responsible for evicting aliens from their homes. Its resemblance to corporate operations reflects its economic power, while its armed security forces indicate its military power; the MNU thus stands for the confluence of economic and governmental racism. Van Dijk (1995, p. 10) claims that to comprehend news media messages, one should also consider the role of these other social institutions; that is, despite some supposedly common moral values of the society, news media professionals may do their jobs in accordance with certain political/ideological beliefs of such institutional powers. In *District 9*, MNU serves this purpose, and the reportages in the first act demonstrate the same racism and xenophobia that MNU does. In this sense, *District 9* illustrates how the news can echo the biased ideology held by powerful social institutions beyond the news media itself.

Two more reportage sequences in the first act further indicate how the news aligns ideologically with MNU. They show aliens attacking humans and brutally screaming. While these very short clips are shown, a reporter voices over that "the residents of the city are trying to 'remove' all the aliens from their township." The racism here frames human residents as heroic and the aliens as invaders to be removed. These reportages show the aliens inflicting violence on the human environment, but they strike a clearly ironic tone; while a reporter implies that one bystander has been hurt because of aliens, a policeman fires his gun at an alien without any warning. And the xenophobic stand that the reportages take remains the same. Because these reportages do not show or dwell on enough information for the facts of these events to be analyzed with any certainty, they raise more questions than answers as to which side is actually the provocateur. These examples acknowledge that only views in accordance with MNU's ideology are conveyed through the news media and that a selective kind of reporting shapes facts to that ideology.

In the film's second act, what the reportages communicate highlights how news media can side with political power in a more immoral way. The reportages falsely accuse Wikus—the only one whose genetics successfully fuse with alien DNA, and who is thus chased by MNU—of having a sexual relationship with an alien and publish a fake photo. The news bulletin furthers the accusations by claiming that Wikus carries a contagious virus that can turn everyone into "monsters." Because a free Wikus is strictly opposed to MNU's economic interests,

related to its plans for extreme experiments with the only alien hybrid, Wikus is targeted by these reports. By aiming to humiliate and isolate Wikus, the news media works for the benefit of a powerful social institution. Although Wikus has not been involved in any major crime, as he flees MNU and voices opposition to it, the news calls everyone to phone a special “Wikus-crime-report-line.” In this regard, the news media takes their side in line with political power. Consequently, the reportages underscore the ideological news; it is mocked, through aesthetic choice.

The main purpose of using mockumentary aesthetics, which opens up a particular critique of the news, is discussed. The rest of the reportages suggest that the double logic of remediation is still at work, aligning with intertexts. Mendacious intertextuality here relies on fake yet familiar use of newsreels, as Harries (2000, p. 28) mentions. In this regard, the ironic content of reportage style is visually made to resemble televised news, and the combination of unreal content with verisimilar visual style underscores the ideological critique. *District 9* thus questions how the news media promotes xenophobia with fearmongering and selective reporting, most evidently in the reportage sequences that frame events as terror attacks (Figure 2). Although violence is executed by Wikus and Christopher, to call it terrorism is certainly an exaggeration. Their aim is not to use a sort of systematic violence against anyone; they agree not to shoot anyone unless the other shoots first. Their goal is to retrieve from MNU what belongs to Christopher. In this sense, reportage style appeals to people’s fears by labeling the violence unjustly as terrorism. In other words, fearmongering here can easily be connected to a deliberate effort to influence people’s ideas and beliefs; hence, it is the way public attention is misdirected, which will be elaborated upon more below.



Figure 2. Although the explosion does indeed give Wikus and Christopher a chance to escape from MNU forces, the news labels it as a terrorist action against a respected social institution (Jackson & Blomkamp, 2009).

Reportages such as these function in tune with a deceptive aspect of the news. It is not new to associate news media with fearmongering in terms of how the news media manipulates people’s opinions; by using fearmongering, news media aims to grab the public’s attention. *District 9* stresses and critiques it by using reportage style. Fearmongering is presented as a technique of persuasion, deliberately and manipulatively promoting fear to influence public opinion. Barry Glassner (2004, p. 823) claims that fearmongering relies mainly on three attributes: repetition, treating rare events as trends, and misdirection. That is, fearmongering helps set the “agenda” for the public so they see things according to how the news media wants them to be perceived. All three of these aspects shape the reportages in *District 9*, although mockumentary aesthetics introduce enough irony to question this practice.

The reportages later in the film particularly use aesthetics to mock fearmongering in the news media. In addition to the reportage illustrated above [1:14:04–1:14:09], another reportage just after this one continues to comment on the attack as a terrorist attack. This sort of continuity of news insisting on terrorism demonstrates the repetition inherent to fearmongering. It also uses testimony from an MNU executive, who persists in claiming a defeated terrorist attack, reflecting the close relationship between misdirection and fearmongering. There is also a live broadcast of a conflict between the MNU and the ship that Wikus controls, as if the chaos is caused only by Wikus. This live broadcast of violent conflict between a

declared terrorist and the legal armed forces also contributes to the fearmongering aspect of the news.

Terrorism news bears a perceptible degree of relationship with fearmongering. It is worth mentioning here Barry Glassner's ideas in that regard. According to Glassner (2004, p. 823), the narrative of terrorism easily declares a [chaotic] decline of the society/civilization where villains are domestic, and only a few heroes fight against them. That is, fearmongering rapidly writes a dystopian scenario such as the one used to describe the conflict between Wikus and the armed forces; it relegates both parties to good and evil in simple terms. With fear and tension aroused, the public agenda is directed to think of what is shown as an increasing trend, and the rhetoric used in these live reportages targets emotional response. The newscaster's voice over the live broadcast resembles commentary on a sports competition rather than combat; in this way, both events are treated as a spectacle, as entertainment. The speaker's voice sporadically shows extra excitement when anticipating an extraordinary act such as a clash, working to maintain enough attention to redirect the public agenda toward a disorder. The remediated intertext thus conveys the idea that nothing is under control, which ironically resembles the fearmongering techniques of the news media as Glassner considers. As well as exaggerated bulletins and subtitles with "fear words" connoting the extreme deadliness of the district, fearmongering portrays a social life and its components, individuals, and places, as well as their interactions, as increasingly hostile to one another. With the reportages in Acts I and II, *District 9* critiques this kind of fearmongering by using a reportage style that highlights the mechanisms at work in its ideological biases.

A Departure from the Genre-Monster and Reportage Style

In *District 9*, reportage rhetoric directly extends into one of the main elements of the diegesis, the protagonist; in other words, it frames Wikus in specific ways. Hence, the faux-reportage style can be further explored if the film's challenge to the science-fiction genre is particularly focused because *District 9* rethinks the "monsters" that the audience expects. Enmeshed in conventions of broad sci-fi along with the subgenres of alien invasion and monster films, cinematic monsters have always been the focal points of spectacle. The film attempts to critically question this and plays with our perception of the established genre monster. *District 9* calls for engagement with Wikus's internal world; in contrast, a conventional movie monster has no interior psyche to explore, yet the repeated appearance of reportage style of *District 9* aims to block this identificatory process.

To illustrate this distinction, this paper will briefly compare the monster in *District 9*—that is, Wikus himself—to how the monster figure emerges in *Star Trek* (2009), released the same year as Blomkamp's film. This comparison will lead to a discussion regarding the specific relation between reportage rhetoric and Wikus, which contributes to the allegory in a certain way.

Within the discourses of race in sci-fi, Christine Cornea (2007, p. 176) regards the image of an alien monster as a visual code of otherness, associated with such notions as fear and anxiety. That is, the monster serves as a visually striking element of mise-en-scene that also acts as an unmotivated (or flimsily motivated) agent of disruption. Although the monster causes chaos that can build up tension or excitement, spectators of the movie are not invited to engage with its internal aspects or changes. This is, for example, the case for *Star Trek*. As a long-running and well-rooted sci-fi franchise, *Star Trek* has long created monsters, and one of the newest—Hengraugg (Figure 3)—may be the most gigantic. Hengraugg is not a protagonist. Its limited appearance condenses its narrative function into creating tension and advancing the protagonist onto the next phase of the plot. Hengraugg's huge size, reddish color, extremely brutal movements, and scary-deep voice define its spectacle, but it has no character development. Spectators are invited to engage with its destruction, but not with its internal world.



Figure 3. Hengraugg pursues its enemies (Abrams & Lindelof, 2009).

Regarding alien-invasion films, Jay Telotte (2001, p. 36), falling into line with Cornea, recognizes a historical connotation of the alien monster as a physical

threat to humanity according to long-standing genre conventions. Major narrative conflict thus implies and reinforces a dichotomy between humans and the alien monster, yet one of the key points distinguishing *District 9* from other alien-invasion films is the eliminated division between human and alien monster. To frame this using Altman's dual concept of film genre, the semantic elements such as alien characters and mothership setting in *District 9* are coded in parallel with the genre-specific conventions; however, the syntactic signals that point to the human-alien hybrid monster demonstrate innovation. This hybridity confounds distinction; the racial (or even arguably racist) division between human and alien monster is ultimately damaged. Despite this antiracist subtext, how the ironically contrary tone of reportage style frames the human-alien hybrid will be discussed further below.

Contrary to *Star Trek*, *District 9* frames the genre monster differently, by linking the concept to the protagonist himself. In the beginning, Wikus (Figure 4) is neither a "monster" nor a sympathetic character. After the inciting incident in which he is poisoned, Wikus physically becomes a monster by undergoing such external changes as losing fingernails and finally developing a monster arm. Although these transform Wikus physically, however, they also invite sympathy. Such changes are shown as an orderly life falling into catastrophe: as a result of the changes, Wikus must leave his home and family, and he is isolated from society and unfairly labeled as an outlaw.

Jonathan Crane (in Fischhoff, Dimopoulos, Nguyen, & Gordon, 2003, p. 4) discusses how a spectator can identify with a monster, claiming that monsters that are misunderstood outcasts are generally pitied and are even occasionally found attractive. Wikus comes to fall into this category; he invites engagement with his internal world as he faces his own transfiguration and the resulting isolation, betrayal, and abuse. Also, in terms of internal changes, character development indicates an ideological change to parallel the physical process. Wikus' gradual transfiguration might seem fearsome, but his path to antiracist hero creates positive space for the viewer to identify with Wikus. To exemplify both the point and Wikus's character development, in the climax of the structure, Wikus as old-xenophobic/racist, or at least a brutal figure, fights for his alien-partner Christopher against MNU. This is basically where the spectators take side with Wikus, identifying with him in his heroic battle alone, despite Wikus's increasingly alien appearance. The monster of *District 9* in this sense claims a departure from the conventional monster.



Figure 4. Wikus gradually transforms into an alien monster (Jackson & Blomkamp, 2009).

After a challenge by *District 9* to the conventional genre monster is considered, its depiction through mockumentary aesthetics can be more confidently revisited. The relationship between reportage rhetoric and the monster makes a valuable contribution to the allegory, in which the news media is the instrument of ideological bias, by placing the protagonist in a racist frame. In contrast to the main narrative arc, Wikus is a conventional genre monster for the reportages; how they frame Wikus is incapable of commanding identification. As with the eliminated dichotomy between human and alien, the racial distinction, concealed, is subtly revealed using remediation signals and intertextual influences.

In line with the evident bias and fearmongering aspects brought forth in the reportage style, Wikus is also depicted in the reportage, which emphasizes his external condition over his inner thoughts and feelings. That is, the reportages resist identifying with Wikus and even work against engagement with him. The formal aspects of these footages are not compatible with identification. Graphical elements such as bulletins and titles, creating an extra-diegesis, zoom-ins/outs and bird's-eye shots that distort how the human eye would view the subject, are additional barriers for such a process. Authoritative voice-overs with the voice of another person instead of with the subject's, along with lack of non-diegetic sound, are not consonant with identification here. This is especially valid for the sound, because of the potential quality of non-diegetic sound to create a more dramatic atmosphere and reinforce key themes.

The reportages do not simply allow for the subjective-internal sound, which would have been a potential invitation for the inside of Wikus's mind. Thus, a possible engagement via auditory means is also blocked by the reportages. These elements therefore emphasize the monster's external qualities rather than give a chance to the monster's internal word. Consequently, in line with fearmongering and racism, mentioned above, the genre-challenging aspects of Wikus are not depicted by the reportages, especially because of the way formal elements are used. By framing the monster in specific ways, reportage rhetoric plays an important part in the allegory in which the relationship between racism and the news media is underscored.

Conclusions

The reportage style in *District 9* resembles everyday news that people encounter through TV news channels. This verisimilar reportage style, its remediation underscoring the ideological bias and fearmongering in screen news media, is ironic and satirical. These two controversial aspects are mocked as they have direct or indirect connections with racism. This makes a significant contribution to the meaning-making of the apartheid allegory in that ideological news and fearmongering are as dangerous and socially damaging as racism precisely because they are themselves racist. Simultaneously, a departure from the genre contributes to the antiracist subtext of the apartheid allegory. The genre-challenging protagonist whose internal aspects the spectators are at least potentially invited to engage with is ultimately an alien, but his transformation, which provokes this engagement by turning the protagonist into an "antiracist hero" with whom spectators identify, is blocked by the reportages; hence, reportage rhetoric contributes to making sense of the allegory in which the news media is a tool of systematic racism. Reportage style and its relationship with the departure from the genre marks an important juncture and innovatively contributes to contemporary sci-fi filmmaking.

Author Note

M. Mert Örsler currently studies in Turkey at the Department of Communication and Design of Bilkent University. Mert is a third-year undergraduate student expected to receive his bachelor's degree in June 2020.

One of his recent scholarly works, which relates Eddie Brock/Venom to the Deleuze-Guattarian formulation of becoming-other, was presented at the 3rd Bilkent Undergraduate Philosophy Conference on 20 April 2019.

The author thanks Dr. Colleen Kennedy-Karpat for her support and guidance throughout the preparation of this essay. Further thanks go to the *Butler Journal of Undergraduate Research* for allowing undergraduate cinephiles to share their scholarly works with a broader audience.

Correspondence concerning this essay should be addressed to M. Mert Örsler, Department of Communication and Design, Bilkent University Main Campus, Bilkent ANKARA, 06800, Turkey, or to mertorsler.1995@gmail.com.

References

- Abrams, J. J. (Producer, Director), & Lindelof, D. (Producer). (2009). *Star trek* [DVD]. United States: Paramount Home Entertainment.
- Ballesteros, I. (2015). *Immigration cinema in the new Europe*. Bristol, United Kingdom: Intellect Books.
- Bolter, J. D., & Grusin, R. A. (2000). *Remediation: Understanding new media*. Cambridge, MA: MIT Press.
- Cornea, C. (2007). *Science fiction cinema*. United Kingdom: Edinburgh University Press.
- Fischhoff, S., Dimopoulos, A., Nguyen, F., & Gordon, R. (2003). Favorite movie monsters and their psychological appeal. *Imagination, Cognition and Personality*, 22(4), 401–426.
- Glassner, B. (2004). Narrative techniques of fear mongering. *Social Research: An International Quarterly*, 71(4), 819–826.
- Harries, D. (2000). *Film parody*. London: British Film Institute.
- Jackson, P. (Producer), & Blomkamp, N. (Producer). (2009). *District 9* [DVD]. United States: Sony Pictures Home Entertainment.
- Miller, C. J. (Ed.). (2012). *Too bold for the box office: The mockumentary from big screen to small*. Lanham, MD: Scarecrow Press.
- Telotte, J. P. (2001). *Science fiction film*. United Kingdom: Cambridge University Press.
- Van Dijk, T. A. (1995). Power and the news media. *Political Communication and Action*, 6(1), 9–36.

DROWNING IN DEPRESSION: A READING OF WILLIAM COWPER'S "THE CASTAWAY"

KATRINA B. SKALKO, MIDDLE GEORGIA STATE UNIVERSITY
MENTOR: LAURA THOMASON

Depression can feel like drowning in the agitated waters of a stormy sea. The unavoidable grip of mental illness can take hold of a person and pull them under in a turmoil of unstable emotion that can seem impossible to survive; some do not. Such is the case in William Cowper's elegiac poem "The Castaway," which takes the reader on a chaotic psychological journey of the literal and emotional meanings of drowning by the fictional sailor and the poet himself to understand the power that depression can wield over the afflicted. "The Castaway" is a metaphor for William Cowper's unstable mental state in the last year of his life and imposes the idea that the hopelessness and despair of depression could befall anyone.

Britannica Encyclopedia hails William Cowper as the upper echelon of English poets of the eighteenth century, the most widely read of his time, and one of the best letter-writers in the English language. The injections of his own tortured emotions into his writing contribute to our understanding of depression within Romantic literature, and his significance as a poet has been sustained through centuries. For future generations of poets, Cowper was to become an iconic figure because of, rather than in spite of, his madness (Darcy). The discoveries of his mental instability and frailty have shed light on the dominance of literary discourse over medical understandings of melancholy and madness in the 1800s.

William Cowper was a remarkable prose writer; he was also plagued by a lifelong severe affective disorder thrashing him about in waves of intense depression and brief moments of religious enlightenment. His mental illness thrust him into "serious bouts of depression and attempted suicides, with his life ending in emotional despair" (Lake 36). Prior to 1773, when the first mental health hospital was opened, doctors were predominantly concerned with minimizing the disruption on the general public by the mentally ill. Professionals in the medical field during Cowper's lifetime lacked the knowledge necessary to diagnose or effectively treat mental conditions; as a result, Cowper's poetry acts as a journal for the natural progression of depression. The fear and isolation of his vacillating mental illness were exposed notably in his poem "The Castaway," which lacks a fixed or unified position and point of view, revealing the internal uproar that Cowper experienced

through most of his life because of unsuccessful treatments for his condition. The frailty of the poet poured onto the pages of his writing, revealing the extent his desolation reached, as well as his consciousness that there was to be no cure for his suffering.

Further breakdown and “reading the text against itself” produce a sense of disunity, of a text engaged in a civil war with itself” (Barry 81). A person who is entrapped in the throes of depression will feel as if a war has been waged within the confines of their mind. If they do not seek the necessary assistance, they can drown in a metaphorical sea of anguish, despair, and isolation. Unfortunately, what a person suffering from depression reveals to the outside world can be in direct opposition to the terror and loss they are experiencing on the inside. Analysis of “The Castaway” discloses a stark contrast between what is professed in the poem and what is expressed in the meaning and tone of the words. A commonality among individuals suffering from depression is an inability to profess or acknowledge precisely what they are suffering through, as the disorder leads to significant difficulties in social functioning. Much like the poem, the afflicted may profess their own stability while those around them begin to see the expression of a life falling apart.

The Encyclopedia of Social Psychology defines depression as “a common disorder primarily characterized by either a low or depressed mood or a loss of interest or pleasure in nearly all activities.” Depression profoundly affects an individual’s thoughts and feelings, having severe consequences, including the risk of suicide. Interpersonal behaviors, combined with negative life experiences, can clash and contribute to an uncontrollable negative cycle of depression that can be difficult to escape. Cowper’s depression was amplified by the loss of his mother when he was six years old and was further fueled by the loss of his close friend Mary Unwin, from which he never fully recovered. The present-day understanding that mild symptoms of depression can increase over time in response to opposing factors helps us to interpret the downward spiral of Cowper’s mental state as he suffered devastating disappointments and losses throughout his life.

“The Castaway,” in an almost elegiac form, tells the story of a sailor who is washed overboard during a particularly stormy night at sea just after his ship has left Great Britain. Much of the poem is told from the perspective of the helpless and abandoned sailor, onto whom Cowper projects his own helplessness and despair, “a transition that I have made so often,” into what he ponders the sailor would be thinking and feeling (Cowper 254). The fierceness of the storm prevents the sailor’s crewmates from saving him, and they are forced to flee for their own

safety, leaving their shipmate to die at the hands of the open ocean. As early as the end of the first stanza, it is no secret that the sailor is going to lose everything, including his own life: “Of friends, of hope, of all bereft” (line 5). Though he is at first confident in his swimming abilities, his confidence falters, bitterness passes briefly, and he then is overcome with hopelessness as he realizes how dire his situation is. When he can no longer hear the cries of his fleeing shipmates, he gives up, allowing the ocean to take him, and he drowns in the crashing waves.

In all of the men Cowper describes in the poem, strength gives way to weakness. Initially, the crewmates are robust in their attempts to save the sailor, and he is described as an expert swimmer; however, strength and confidence both dissipate when the sailor experiences helplessness and an emotional breakdown at realizing the physical impossibility of his crewmates saving him.

Although medical professionals in the eighteenth century thought that religious radicalism caused madness, it was not yet medically reasoned whether Cowper’s spiritual beliefs caused his depression. The daily life and the spiritual life “cannot be compartmentalized. They ride parallel with each other. The issues of life influence spirituality and spirituality influences life” (Lake 41). Cowper suffered fluctuating periods of depression as early as 1743, when he was just a child. In the 1760s, during the immense wake of the Evangelical Revival, Cowper converted to Calvinism. The ensuing religious fanaticism convinced Cowper that he was damned by God, as he wrote to a friend: “As to myself, I have always the same song to sing—Well in body, but sick in spirit; sick, nigh unto death” (Cowper 345). During a time when medical science had not discovered the root of mental illness, an individual with a mental disorder could feel strongly that God was the ultimate judge, their sins against him unforgivable, and that God was the source of their mental anguish. Cowper was convinced that he was plummeted into the darkness of his mental illness by God because of his sinfulness, despite having lived a pious and reclusive life; he expressed in a letter to his spiritual mentor, John Newton, “for my spiritual props have long since been struck from under me” (Cowper 249). In 1763, he attempted one of numerous suicides and was placed in an institution. Despite regaining a stable state of mind, he experienced bouts of depression in 1787 and 1792, and his mental anguish was persistent from 1794 until his death in 1800.

Cowper’s case represents a pivotal point in the politics of madness and religious fanaticism, however (Darcy). Just after his death, the medical field began to accept that insanity and other forms of mental suffering were not caused by theological extremism but, in fact, quite the opposite. Jane Darcy, in a test case of

William Cowper and religious melancholy, documented that in the seventeenth century, a “new generation of physicians insisted that religious melancholy was a mental symptom, indicative of a diseased brain.” By the eighteenth century, religious melancholy had already begun to dissipate as a medical diagnosis, in favor of concrete psychological understandings that were emerging. Medical interest in Cowper’s case peaked in the nineteenth century after publications of his biography exposed the language he used to self-report his mental condition in letters to his friends.

Today, mental illness is understood to a much greater extent, though a degree of stigma still surrounds its causes and treatments. In the 1700s, however, mental illness was not scientifically understood. As a result, “prevailing treatments included solitary confinement, conditioned fear of the doctor, powerful but minimally effective drugs, bleeding, shackles, and plunge baths. It was thought that the patients had chosen a life of insanity and need[ed] to decide to change their ways” (Coy). Treatment facilities were barbaric, and further damage was done to the patients therein. Cowper was a victim of those popular yet ineffective treatments, and, given the numerous and devastating losses he suffered, along with the religious fanaticism that had a firm grip on him, he was never truly able to release himself from the damaging emotions that entrapped him for most of his life.

Through analysis of Cowper’s poem, we can suggest interpretations of his intentions and meanings, but the most hearty evidence of his dejected mental state can be found in his personal letters to his friend and mentor, John Newton, published in *The Private Correspondence of William Cowper Esq., with Several of His Most Intimate Friends*. Within these personal letters, Cowper lays bare his awareness of his mental deterioration after years of expressing his vehemently religious beliefs. He confessed that he was “overwhelmed with the blackest despair,” counterpointed by feelings of elation, for eleven years, these always coming and going as the rushing waves of the ocean. This emotional turmoil changed with the seasons, with Cowper always expressing more depression in the winter (Cowper 243). Seasonal affective disorder (SAD) is a mood disorder that most often recurs in autumn and winter, triggered by the increased number of dark hours as the daylight grows progressively shorter. Cowper experienced some of the symptoms of SAD: fatigue, difficulty concentrating, withdrawal from family and friends, and reclusion from social activities. Cowper seemed aware of the metaphorical waves of his depression many years before writing “The Castaway” in 1799, one year before his death. This cognizance is evidenced by his expression to Newton in a letter dated May 1785 that he has experienced feelings of

hopefulness, “though they have been of short duration; cut off, like the foam upon the waters” (Cowper 406). Having suffered from depression from a young age, Cowper was no novice to the feelings of emotional ups and downs that accompany mental illness, and he likely felt those waves of emotional chaos crashing over himself long before he composed his poem of the sailor who felt the waves of the stormy sea crashing over him.

In “The Castaway,” Cowper laments the last hours of the doomed sailor and conveys his own dejected state of mind as likened to the situation the sailor finds himself in. In line 6, the speaker refers to “[h]is floating home,” alluding to both the ship and the unstable ground of mental illness. From the poem’s evocation of this poignant impermanence, the reader can feel the sense of hopelessness and helplessness that the sailor experiences, which align strikingly with the feelings that consume those suffering from depression. Through the words of Cowper and those spoken by the narrator as the plight of the sailor is laid out on the page, it is apparent that no one is unsusceptible to the horror that is depression. Much like Cowper, the sailor is powerless to change his predicament, as is anyone lost in a sea of mental instability.

Cowper hints at the inspiration for his overboard sailor by referencing George Anson in line 52, who wrote of his expeditions in *A Voyage Round the World* in 1748. “The Castaway” is based on a particular incident in the book, in which one of the sailors was washed overboard as the ship rounded Cape Horn in the middle of a terrible storm (Packer n5). At first glance, the poem appears to be integrated and flowing coherently, yet contradictions between life and death, hope and despair, and closeness and isolation begin to emerge as the narrator draws the sailor from a life full of hope and companionship on shore to abandonment, isolation, and, ultimately, death at the hands of the open ocean. Cowper singles out an unknown sailor from Anson’s expeditions for his poem and intermingles his own hope and despair, and life and death, with those of the sailor: “But misery still delights to trace / Its semblance in another’s case” (lines 59–60). The line is blurred between Anson’s journaled recounts of his expeditions and Cowper’s poem when the speaker acknowledges the resemblance between the two. Such a reference also suggests that Cowper is presenting himself and his own life as the semblance to the abandoned and drowning sailor, as the poem is suggestive of his own depressive state.

The oppositions throughout the poem appear to create opposition in the sailor and Cowper as well, yet both are drowning and facing looming death. This lack of a fixed position lends itself to recognition of the psychological battle the

sailor endures when his confidence swiftly dissipates and is replaced by helplessness and despair:

Expert to swim, he lay;
Nor soon he felt his strength decline,
Or courage die away;
But wag'd with death a lasting strife,
Supported by despair of life (14–18).

Much as the poem seems to fluctuate between the thoughts and emotions of Cowper, his speaker, and the drowning sailor, depression can also feel as if the one suffering lacks a fixed position. The afflicted individual's mood, thinking, and behavior often shift drastically, creating feelings of instability, confusion, and helplessness, all symptomatic of depression, and those around the individual are powerless to save them. This helplessness is echoed in the crew members aboard the ship, whose attempts to save their crewmate are thwarted by the rough storm and the vicious Atlantic sea. The sailor is able to hold himself above water for a time, but ultimately, his fate cannot be escaped, and Cowper is no exception. Waves overtake them both; one drowns in the sea, the other in depression.

Analysis of this intensely personal and dramatic narrative poem divulges a stark contrast between what is said in the poem and what is expressed. Lack of unity and consistency can be found throughout the poem, from the fluctuations in tone, perspective, and point of view. Even the title suggests that the protagonist in the poem is “cast away,” implying that he is abandoned by his ship when, in truth, he is washed overboard by the storm and unable to be saved by his crewmates, despite their best efforts. Cowper felt cast away in a very literal sense and connected with the sailor's plight. Depression can cause the afflicted to feel as if they have been cast away from society, caught in their own internal storms until they drown in the emotional upheaval that overtakes them. Though the sailor does not blame his crewmates for leaving him and he recognizes “that flight, in such a sea / Alone could rescue them” (lines 33–34), he implies that they desert him in their efforts to save themselves. In fact, his feelings of resentment and desertion begin to appear in lines 23 and 24, when the speaker informs that “[t]hey *left* their *outcast* mate behind” (my italics), a clear indication that, although understanding was originally professed, the expression is not as positive. The entire sixth stanza is rife with descriptions of his bitterness; words such as “cruel,” “condemn,” “haste,” “bitter,” and “deserted” pepper the stanza and expose true feelings of resentment, which

often accompanies depression. By electing to use these terms, Cowper shows that his own experiences reside well within the norms of universal human suffering.

The perspective of speakers throughout the poem destabilizes the identity of whom we are receiving the narrative from: the sailor, the narrator, or Cowper himself. The poem implies that Cowper is injecting his own feelings about his depression into the narrative and relating directly with the drowning sailor, his depression amplifying his feelings of being cast aside by family and friends in his life. Depression causes negative feelings in individuals, which can result in isolation, avoiding situations that could potentially bring the perceived negativity to the forefront. The speaker in the poem acknowledges, on behalf of the sailor, that the crew had no choice but to flee the storm, yet the sailor expresses bitterness that more is not done to save him: “Whate’er they gave, should visit more” (line 30). His understanding turns to feelings of isolation, amplifying his dire situation when he realizes that, as close as his crewmates are in proximity, they are powerless to save him.

Cowper’s presence can be felt at the beginning of the poem, as well as at the end. The chosen pronouns throughout the poem create a lack of a singular, fixed, point of view. The speaker at once refuses to identify with the sailor’s plight yet melds his own emotions, fears, and isolation in nearly seamless alterations between the surface story of the sailor and the more in-depth story hiding beneath it: Cowper’s own mental breakdown. Throughout the poem and the shifts between life and death, and between hope and despair, Cowper maintains the sailor’s anonymity, allowing only glances at the metaphors between the drowning sailor and the poet himself. The shift from “I” to male pronouns in the first stanza indicates that Cowper immediately sees the narrative poem as a metaphor for his own life. Just as quickly, he abandons self-identity and refers to the sailor using male pronouns. He again shifts back to the use of self-identification in the tenth stanza, by saying, “I therefore purpose not, or dream” (line 55). The poem reveals two very individual layers, but the shifts are so erratic that the amalgamation creates a relationship between the imaginative story of the sailor drowning and Cowper’s own feelings of isolation, abandonment, and loss. By viewing these destabilized borders between Cowper, his narrator, and the sailor, one can see how depression could befall anyone.

The last stanza entangles the loneliness felt by both Cowper and the sailor, a feeling so deep that even divine intervention cannot save either of them: “We perish’d, each alone: / But I beneath a rougher sea, / And whelm’d in deeper gulfs than he” (lines 64–66). In moments of crisis, the elasticity of time makes minutes

seem like hours: “He long survives, who lives an hour” (line 37). The last hour of the drowning sailor provides a striking metaphor for the last year of Cowper’s life, in which he struggled to keep from drowning in his own depression and fear, imagining himself “as a castaway on an even deeper sea than the one in which the sailor perished” (Packer). Profoundly alone and hollow of all hope, the speaker knows as early as line 11 that death is imminent for the sailor, and Cowper knew that his time was drawing near as well. “Pain and gloom were the first and last chapters to the story of William Cowper,” and Cowper projected that sentiment onto the sailor in his narrative poem at both the beginning and the end (Lake 44). He professed that the sailor loved Albion, or Great Britain, and the ship, but that love was in vain, as all would be lost to the sailor in the end, including the sailor’s own life. In an eerie prophecy of Cowper’s own demise, the lack of a happy ending in the poem reverberates with anyone who has experienced hopelessness through depression.

In 1792, just eight years before his death, Cowper succinctly expressed in a letter the instability he had felt for much of his life, an instability that reverberates with the drowning sailor: “The future appears gloomy as ever; and I seem to myself to be scrambling always in the dark, among rocks and precipices, without a guide, but with an enemy ever at my heels, prepared to push me headlong. Thus I have spent twenty years, but thus I shall not spend twenty more years” (Cowper 331). These same gloomy, scrambling, lost, and lonely feelings are universally shared by anyone afflicted with depression. Through the words of the speaker describing the sailor’s last moments, Cowper, consumed by his own fears of his imminent death, gives palpability to his own despair and abandonment, and he will soon drown as well. Waves eventually overtake both the sailor and Cowper, and neither survives the storm.

Works Cited

- Barry, Peter. "William Cowper, 'The Castaway.'" *Beginning Theory: An Introduction to Literary and Cultural Theory*. 4th ed. United Kingdom: Manchester University Press, 2017. 79–81, 346–348. Print.
- Cowper, William. *Private Correspondence of William Cowper, Esq., with Several of His Most Intimate Friends*. London: H. Colburn, 1824. Web. 5 Dec. 2019. <<https://catalog.hathitrust.org/Record/001368739>>.
- Coy, Abigail. "Mental Health in Colonial America." *The Hospitalist* May 2006. Web. 5 Dec. 2019. <<https://www.the-hospitalist.org/hospitalist/article/123117/mental-health-colonial-america>>.
- Darcy, Jane. "Religious Melancholy in the Romantic Period: William Cowper as Test Case." *Romanticism* 15.2 (July 2009): 144–155. Web. 5 Dec. 2019. <doi:10.3366/E1354991X09000622>.
- Lake, Vanessa L. "Happily Ever After? An Investigative Analysis on the Spiritual Life of William Cowper." *Journal of European Baptist Studies* 5.2 (Jan. 2005): 35–48. Web. 4 Dec. 2019. <search.ebscohost.com/login.aspx?direct=true&AuthType=ip,shib&db=a9h&AN=36217265&site=eds-live&scope=site>.
- Merrill, Katherine, and Thomas Joiner. "Depression." *Encyclopedia of Social Psychology*. 1st ed. Ed. Roy F. Baumeister and Kathleen D. Vohs. Thousand Oaks, CA: Sage, 2007. Web. 1 Mar. 2020. <<https://go.openathens.net/redirector/mga.edu?url=https%3A%2F%2Fsearch.credoreference.com%2Fcontent%2Fentry%2Fsagesocpsyc%2Fdepression%2F0%3FinstitutionId%3D3733>>.
- Packer, Barbara. "Hope and Despair in the Writings of William Cowper." *Social Research* 66.2 (1999): 545–564. Web. 29 Oct. 2019. <www.jstor.org/stable/40971337>.

“William Cowper.” *Encyclopaedia Britannica*. 2020. Web. 29 Feb. 2020.
<<http://www.britannica.com/biography/William-Cowper>>.

“William Cowper.” Editorial. *Poetry* 2020. Web. 1 Mar. 2020.
<<https://www.poetryfoundation.org/poets/william-cowper>>.

PARENT INTERACTION WITH AN INFANT WITH A COCHLEAR IMPLANT AND ADDITIONAL DISABILITIES

LILLIAN J. SOUTHERN, BUTLER UNIVERSITY
MENTOR: TONYA BERGESON-DANA

Abstract

Pediatric hearing loss presents many spoken-language learning issues that can affect parent-infant interaction. Moreover, additional disabilities are likely to increase stress, which could have cascading effects on communication. The purpose of this study was to examine interactions between mother-child and father-child dyads with and without hearing loss and/or autism spectrum disorder (ASD), cytomegalovirus (CMV), and global delay. Recordings of the parents speaking with six infants were analyzed: an infant with cochlear implants and ASD (low socioeconomic status [SES]), two infants with cochlear implants and normal development (high SES and low SES), one infant with a cochlear implant and CMV (average SES), one infant with a cochlear implant and global delay (average SES), and one infant who was typically developing and had normal hearing (high SES). After analyzing the results for communication measures, such as vocalization attempts, turn-taking in utterances, mean length of utterances, and type-token ratio, it was concluded that maternal and paternal interaction were negatively affected only because of the difficulty of the hearing loss and/or additional disability, but because of a combination of factors including the disability, SES, maternal and paternal education, and home environment.

Little if any research to date has been conducted on the influence of maternal and paternal interaction when an infant has both hearing loss and additional disabilities (Beer, Harris, Kronenberger, Holt, & Pisoni, 2012; Meinzen-Derr, Wiley, Grether, & Choo, 2011). Beer and colleagues (2012) studied the language development of children with cochlear implants and additional disabilities ranging from cognitive or learning delays to autism spectrum disorders (ASDs), developmental delays, and other syndromic conditions. Understanding that typical testing would not be as effective for individuals in this population, the researchers created a battery of tests specific for testing children with disabilities. Beer et al. (2012) tested for functional auditory skills, which assesses the infant's ability to respond spontaneously to sounds in the environment, using the Infant Toddler:

Meaningful Auditory Integration Scale (IT-MAIS; Zimmerman-Phillips, Robbins, & Osberger, 1997); receptive and expressive language, using the Preschool Language Scale, 4th Edition (PLS-4; Zimmerman, Steiner, & Pond, 2002); adaptive behaviors such as communication abilities, daily living skills, socialization, and motor skills, using the Vineland Adaptive Behavior Scale (Sparrow, Cicchetti, Balla, 2005); and cognitive functioning, using the Bayley Scales of Infant and Toddler Behaviors (Bayley, 2005). After assessing the 23 children in the study with a pre-test, before cochlear implantation, and post-test, Beer et al. (2012) found that overall, the participants with hearing loss and additional disability made progress in functional auditory skills, receptive and expressive language, and adaptive skills after one year of implantation. The data were compared to those for children who also had cochlear implants at the same age at implantation who did not have additional disabilities. Beer et al. noted that the children with cochlear implants and additional disabilities did not see the same level of progress as their cochlear implant-only peers but still made some progress in language development. This research is important for the current study because it suggests that there is development of language skills in children with hearing loss and additional disabilities.

Studies from the two different fields suggest that having a disability in addition to cochlear implantation would affect mother- and father-infant interactions in many forms. When parents interact with an infant with a hearing loss, previous studies have suggested different methods of communication to maximize speech and language outcomes, such as being direct with the infant during the interaction and reinforcing the infant's vocalization attempts (Choo and Dettman, 2016). Focusing more on the interaction to ensure the infant is both understanding parental speech and trying to create a conversation of their own might also be beneficial. Being attentive to the conversation is very important, and something most parents of typical-hearing infants would not naturally focus on as thoroughly. When additional disabilities are added to the mix, communication attempts could possibly be more difficult. As such, it is hypothesized that parent interaction will be negatively affected because of the added difficulty of the conversation.

Caregiver Interaction and Cochlear Implants

Previous research done by Fagan, Bergeson, and Morris (2014) has examined how maternal interaction differed before and after an infant received a cochlear implant. The researchers compared mother-infant vocal synchrony,

maternal complexity, and maternal directives and found that mothers adapted their speech to try to conform to the hearing loss, rather than using communication similar to that used by mothers speaking to infants with typical hearing. For example, mothers' mean length of utterances (MLU) was less complex than that of speech to hearing infants the same age, and mothers' utterances overlapped the infants' speech more than with hearing infants, rather than typical turn-taking. Fagan and colleagues suggested that infants' ability to perceive sounds after cochlear implantation contributes to their mothers' increasing awareness of the infants' auditory abilities, which results in changes to mothers' reciprocal communication. Many mothers change their communication habits to better fit infants' emerging vocabularies; for example, they may use simple utterances and less back-and-forth conversation when dealing with infants with cochlear implants. Fagan et al. suggest that it is important to enhance interactions to help with infants' language learning.

It is important for parents of infants with hearing loss and cochlear implants to be educated on how to best promote language learning and communication. Choo and Dettman (2016) examined the effect that maternal interaction has on the communication of an infant with a cochlear implant, as well as strategies to best promote interactions. Most parents and infants who have cochlear implants interact with an aural-oral approach, which focuses on visual interaction and spoken language. Choo and Dettman suggest that additional interaction might help advance the infant's communication and language learning. That is, interaction techniques can differ based on whether the focus is on the parent input or on encouraging reciprocal communication. Parent input is focused on using interesting voices, increasing frequency and consistency of the interactions. This can be done by sitting closer to the infant or using more facial expressions and gestures. Reciprocal communication involves finding ways to be more attentive and interactive in communication attempts, such as creating a back-and-forth interaction with the infant. The goal of the approach with infants with cochlear implants would be to use a combination of techniques, encouraging parents to use these strategies to not only improve their own interactions but also help their infants interact and communicate more efficiently. The more focused the interaction, the better chance the infant has at acquiring language, learning to interact well with others, and carrying out an interactive sequence.

Autism Spectrum Disorders

For more than 75 years, research has been evolving to better understand autism spectrum disorder (ASD). According to Faras, Ateeqi, and Tidmarsh (2010), ASD is categorized by three main deficits, including impaired communication, impaired social interaction, and restricted and repetitive patterns of behavior and interest. Because autism is a spectrum disorder, the impairments range in severity and can change through acquisition of additional developmental skills (Faras et al., 2010). With the characteristics of ASD in mind, the inability to communicate socially can influence the caregiver-infant interaction, creating more-stressful communication attempts because of the deficits mentioned previously. As such, the ability to understand characteristics of ASD is important for any parent who has to partake in such interactions.

Before the official age of diagnosis, signs of autistic behavior have been observed in research during play or personal interaction. These cues can range from lack of eye contact to more specific aspects, such as limiting their focus. According to Bentenuto, De Falco, and Venuti (2016), infants who were later diagnosed with ASD showed signs of limited symbolic play, or of shortening their play sequences and not creating pretend scenarios with their dolls or toys. The researchers also noticed infants limiting their selection of toys, choosing to focus on a single object rather than switching attention to more than one toy. Another behavior during infant play that has been shown to be a cue to ASD is “sticky attention,” or what Sacrey, Bryson, and Zwaigenbaum (2013) describe as a child taking “longer to disengage their attention toward a second, peripheral target” (p. 442). “Sticky attention,” or staring, is a cue present in many infants but is usually outgrown by the end of the first year (Sacrey et al., 2013). When that behavior continues for infants past one year old, it could be a sign of autistic behaviors.

Global Delay

Mithyantha, Kneen, McCann, and Gladstone (2017) describe global delay as a delay in two or more developmental domains. Domains can include gross or fine motor skills, speech and language, cognition, and social or personal skills, most commonly affecting children under the age of five years old (Mithyantha et al., 2017). Global delay can be classified as mild, moderate, or severe. As global delay affects more than one area of developmental domains, the additional impact of hearing loss can cause major difficulty in communication with the infant.

Cytomegalovirus

Cytomegalovirus (CMV) is the most common congenital infection that can cause disease in infants, according to Zuylen et al. (2014). Infants are infected by CMV during pregnancy, as the maternal infection crosses the placental barrier (Zuylen et al., 2014). Although a relatively mild infection for the mother, it can have devastating effects on the infant. Infants with CMV can have varying symptoms, including but not limited to unilateral or bilateral sensorineural hearing loss, vision loss, jaundice, seizures, and mental disability (Zuylen et al., 2014). According to Zuylen and colleagues, CMV is the leading cause of sensorineural hearing loss in developed countries. As such, the possibility of infants with CMV wearing cochlear implants is high. This can affect maternal and paternal interaction with infants, as hearing loss is just one of many symptoms that would affect the conversation. Understanding how best to interact with the infant will be most beneficial to parents as they try to navigate communication when cochlear implants and additional disabilities are involved.

Infant-Directed Speech and Later Language Learning

Infant-directed speech (IDS) is classified by slower rate, greater pitch variations, longer pauses, repetition, and shorter sentences (Ma, Golinkoff, Houston, and Hirsh-Pasek, 2011). Individuals can use IDS to gain an infant's attention or, as research has suggested, encourage language acquisition (Ma et al., 2011). Ma and colleagues investigated whether 21-to-27-month-old children gained a larger vocabulary when taught with IDS compared to adult-directed speech. The results suggest that IDS facilitates language learning, particularly for younger infants who have a lower vocabulary. Ma et al. concluded that presenting infants with IDS shows greater gains than adult-directed speech in language acquisition in young infants. It is therefore important for the current study for parents to implement IDS early during interactions.

Together, these studies suggest that implementation of IDS in interaction in the early stages of development has a positive effect on language acquisition—but when interacting with an infant with a hearing loss or additional disabilities, how does IDS compare across infants? It is hypothesized that parent interaction in the current study will be negatively affected by the difficulty of the conversation.

Parental Stress Associated with Hearing Loss

Parental stress can be seen in any parent-child relationship due to the obstacles that appear when raising a child. These stressors, however, can be heightened when a child has a hearing loss. When parents discover that their child has a hearing loss, they often undergo a grieving process, which can be triggered as the child continues to grow and as new hardships surface (Sarant and Garrard, 2013). Sarant and Garrard state that parents will also face “ongoing practical challenges,” such as increased medical appointments, education about hearing loss and management of cochlear implants, learning how to come to terms with their child having a disability, and learning how to best advocate for their child’s needs. Additional factors examined to cause stress include child age, age of diagnosis, social support, parental education, and parental income (Sarant and Garrard, 2013).

Although parental stress was not specifically studied in this research, understanding the stressors that surface when a parent has an infant with a hearing loss is important when observing the parent-infant dyads in the study. It was understood when observing the dyads that the stressors mentioned above are present in the interactions, further affecting the communication beyond the hearing loss or other disabilities present.

Methodology

Participants

In the study, LENA audio recordings were analyzed for six infants who participated in an NIH-NIDCD-funded research study with collaborators at The Ohio State University. The LENA is a recording device that the infant wears throughout the day. It records all interactions that take place and is used to pull out information about the infant's language abilities and communication skills. For this study, the LENA audio recordings were completed in each infant's home and included interactions with the infant's mother as well as select interactions with both the mother and father. This study analyzed recordings of the parents speaking with six infants: one infant with cochlear implants and ASD (low SES), two infants with cochlear implants and normal development (one high SES and one low SES), one infant with a cochlear implant and CMV (average SES), one infant with a cochlear implant and global delay (average SES), and one infant who was typically developing (high SES). The LENA recordings were filtered, pulled from interactions during mealtime, playtime, story time, or bedtime routine, a segment

of the day that would yield high interaction and language content. These interactions were chosen because of the amount of time required to analyze the audio recordings, making sure specific and informative data were retrieved. This time was chosen because of to the consistency in daily interaction, as well as consistency across participants.

Procedure

The first phase of the study focused on transcribing the maternal and paternal interactions. For the infant with cochlear implants and normal development (low SES) and the infants with cochlear implants and an additional disability (ASD, CMV, global delay), the LENA recordings were transcribed at three-, six-, and nine-month intervals after activation of the infant's cochlear implant (or after the first recording session). For the infant with cochlear implants and normal development (high SES) and the infant with normal development and normal hearing, the LENA recordings were analyzed for three months after activation of the infant's cochlear implant and three months of age, respectively. Most of the audio recordings had two to three days of recordings per monthly interval, meaning at each month interval, two to three days of LENA recordings had been recorded in the infant's home, allowing about 16 hours of audio recording per day. The audio recordings were first timed out to determine what type of interaction would provide the best depiction of the communication occurring between the infants and their parents. After the audio file was listened to (and timed out), the transcription took place, which entailed the conversation between the infant and parent being typed out. During the transcription, codes were included that would allow for an easier understanding of the interaction that had taken place. For example, if the parent used any type of repetition or imitation of the infant's speech, a code was recorded, which can be used to understand what type of interaction the infant preferred, as well as how the parents used different strategies to elicit vocalization from the infants (see Table 1). This process was repeated for each infant.

[IMITATE]	Parent imitated child’s vocalization
[LAF]	Laughing
[SENM]	Sound effect, no meaning
[SEM]	Sound effect, meaning (i.e., woof for dog barking)
[REP:n]	Repetition of a sound
[UREP]	Repetition of an utterance
[PUREP]	Partial repetition of an utterance
[EUREP]	Expanded utterance repeated
[IV]	Infant vocalization
[IC]	Infant crying
[NRC]	No response from child
[NRP]	No response from parent
[TARn:n]	Target word: number of times used
[IDS]	Infant-directed speech
[SU]	Unintelligible speech understood by parent

Table 1. Codes Used During Transcription of Parent-Infant Interactions

Once the transcripts were complete for each infant at each month interval mentioned above, the transcript was processed through software called Systematic Analysis of Language Transcripts (SALT; Miller, Andriacchi, & Nockerts, 2015), which provided detailed analyses based on the language used during the conversation. During the three-month interval, the analyses focused on vocalization attempts (parent initiating a conversation with the infant or responding to the infant-initiated conversation), turn-taking in utterances (“switching between comprehending the partner’s utterance and producing an appropriate and timely response”; Corps, Gambi, & Pickering, 2018), MLU (calculated by the number of morphemes, or smallest element of language, in each utterance—e.g., “I like dogs” is an MLU of 4 because of the –s added to dog; Williamson, 2014), and type-token ratio (total number of different words divided by the total number of words; Templin, 1957) for the parents and the infant. When comparing the infants with cochlear implants and additional disabilities, with cochlear implants, and with normal development, SALT analysis was further used to determine the target-word repetition (how many times the parent would specifically repeat a word to try to provide a language-learning opportunity—e.g., repeating the word “milk” so the infant would associate the word with the object being discussed), repetition (the number of times the parent repeated what the infant said during the conversation), IDS, electronic use (amount of media used daily in the home), and American Sign Language (ASL) use for the parent and infant across the six- and nine-month intervals (see Tables 2–4).

Results

The Role of Additional Disabilities

When considering the role of additional disabilities in the study, no differences across groups were discovered (Tables 2–4). Although there are no differences, noting that the additional disabilities did not affect parent-infant interactions is an important result.

The Role of Socioeconomic Status

Specific details about the communication attempts of both the parents and infant were analyzed using SALT. When comparing the averages acquired across the six dyads (Table 2), the families with high SES had a higher number of vocalization attempts, had more turn taking, and used more utterances in their interactions than those with low SES. For example, two dyads have infants with cochlear implants and normal development, but one of those dyads has a high SES and the other has a low SES. Concerning their vocalization averages, the dyad with high SES had an average of 98 attempts, while the low had an average of approximately 22 attempts. Because the infant diagnosis is the same, the family's SES is a key contributor in how the communication between the parents and the infant is affected. It was assumed that the dyads that have a cochlear implant and an additional disability would have similar results, but that is not the case. The dyads with CMV and cochlear implants and those with global delay and cochlear implants both have an average SES, while the dyad with ASD and cochlear implants has a low SES. The average-SES dyads have vocalization and turn-taking attempts more than double those of the low-SES dyad, as well as a higher MLU, with averages more similar to those of the high-SES dyads. Because the ASD-and-cochlear implant dyad was so much lower than the others, it is assumed that SES plays a significant role.

	SES		Vocalization		TT (Utterances)		MLU (Words)		TTR	
	M	I	M	I	M	I	M	I	M	I
ND/NH	High		43.5	16	4.39	1.58	7.65	1.00	0.42	0.16
ND/CI	High		98	106	1.94	1.87	4.87	1.04	0.41	0.16
ND/CI	M&F	I	M&F	I	M&F	I	M&F	I	M&F	I
	Low		21.67	36	2.16	2.24	2.79	1.12	0.51	0.40
ASD/CI	Low		16.5	29.3	1.63	2.59	3.13	1.00	0.55	0.06
GB/CI	M	I	M	I	M	I	M	I	M	I
	Average		47.5	15.5	3.00	1.29	4.46	1.00	0.57	0.14
CMV/CI	M	I	M	I	M	I	M	I	M	I
	Average		83	24	4.31	1.18	4.19	1.00	0.31	0.11

Note. ASD = autism spectrum disorder; CI = cochlear implant; CMV = cytomegalovirus; GB = global delay; I=infant; M = mother; M&F = mother & father; MLU = mean length of utterances; ND = normal development; SES = socioeconomic status; TT = turn taking; TTR = type-token ratio.

Table 2. Comparison of Average Infant and Parent Communication, 3 Months after Activation of Cochlear Implant

The Role of the Environment

For six and nine months, averages were documented in terms of vocalization attempts, turn taking in utterances, MLU, type-token ratio, target-word repetition, repetition, IDS, electronic use, and use of ASL (Tables 3 and 4). For both time intervals, each dyad had similar averages for vocalization attempts, unlike in the three-month results. This similarity could be due to the parents becoming more familiar with their infants' hearing loss and disability, the parents learning how to better communicate with their infants, or due to the therapy that both the parents and infants were receiving, causing interactions to come with more ease. The ASD-and-cochlear implant dyad was still lower in certain aspects of the interaction, however, such as lower MLU and IDS at six months post-activation, and lower turn taking and target-word repetition at nine months post-activation.

This infant was also exposed to three times the amount of media and electronics use than those in other dyads were, which can drastically affect language and communication. These factors combined showed that the environment can have a significant impact on the interaction, demonstrating that the interaction is affected by more than the infant having a hearing loss and additional disability as originally hypothesized.

	SES		Vocalization		TT		MLU		TTR	
	M&F	I	M&F	I	M&F	I	M&F	I	M&F	I
ND/CI	Low		44.2	33.6	2.12	1.66	4.26	1.10	0.47	0.38
ASD/CI	Low		32.3	47.3	1.61	1.72	4.10	1.00	0.53	0.05
GB/CI	M	I	M	I	M	I	M	I	M	I
	Average		44.00	22.00	2.27	1.47	4.71	1.00	0.48	0.12
CMV/CI	M	I	M	I	M	I	M	I	M	I
	Average		23.00	14.00	2.06	1.47	5.23	1.00	0.51	0.14
	TWR		Repetition		IDS		Education Level		ASL Use	
	M&F		M&F		M&F		M&F		M&F	
ND/CI	3.8		5.6		5.0		HS/GED		0	
ASD/CI	0.7		7.67		1.5		9 th grade and HS/GED		0	
GB/CI	M		M		M		M		M	
	7.5		4.0		8.0		HS/GED		0.5	
CMV/CI	M		M		M		M		M	
	1.0		1.5		4.5		Associates Degree		2.5	
	Age		Electronic Use							
	I		I							
ND/CI	25 months		5%							
ASD/CI	I		I							
	21 months		22%							
GB/CI	I		I							
	23 months		4%							

	I	I				
CMV/CI	19 months	8%				

Note. ASD = autism spectrum disorder; ASL = American Sign Language; CI = cochlear implant; CMV = cytomegalovirus; GB = global delay; HS/GED = high school diploma; I = infant; IDS = infant-directed speech; M = mother; M&F = mother & father; MLU = mean length of utterances in words; ND = normal development; SES = socioeconomic status; TT = turn taking in utterances; TTR = type-token ratio; TWR = target-word repetition.

Table 3. Comparison of Average Infant and Parent Communication, 6 Months after Activation of Cochlear Implant

	SES		Vocalization		TT		MLU		TTR	
	M&F	I	M&F	I	M&F	I	M&F	I	M&F	I
ND/CI	Low		46.00	30.67	2.09	1.66	4.51	1.49	0.50	0.46
ASD/CI	Low		57.30	54.30	1.25	1.04	5.41	1.05	1.02	0.46
GB/CI	M	I	M	I	M	I	M	I	M	I
	Average		48.5	13.00	3.8	1.04	4.88	1.00	0.29	0.16
CMV/CI	M	I	M	I	M	I	M	I	M	I
	Average		78.00	20.50	6.40	1.05	4.65	1.00	0.34	0.09
	TWR		Repetition		IDS		Education Level		ASL Use	
	M&F		M&F		M&F		M&F		M&F	
ND/CI	4.33		6.67		3.33		HS/GED		2.67	
ASD/CI	0.25		14		7.5		9 th grade and HS/GED		0	
GB/CI	M		M		M		M		M	
	2.5		1.5		5		HS/GED		4	
CMV/CI	M		M		M		M		M	
	3		5.5		14		Associates Degree		1	
	Age		Electronic Use							
	I		I							
ND/CI	28 months		7%							

	I	I				
ASD/CI	24 months	29%				
	I	I				
GB/CI	26 months	N/A				
	I	I				
CMV/CI	22 months	N/A				

Notes: ASD = autism spectrum disorder; ASL = American Sign Language; CI = cochlear implant; CMV = cytomegalovirus; GB = global delay; HS/GED = high school diploma; I = infant; IDS = infant-directed speech; M = mother; M&F = mother & father; MLU = mean length of utterances in words; ND = normal development; SES = socioeconomic status; TT = turn taking in utterances; TTR = type-token ratio; TWR= target-word repetition.

Table 4. Comparison of Average Infant and Parent Communication, 9 Months after Activation of Cochlear Implant

Discussion

It was hypothesized that parent interaction would be negatively affected by the added difficulty of the conversation when an infant has a hearing loss and an additional disability; however, the findings suggest that the interactions were not affected by the additional disability alone but rather by other factors influencing the interaction.

Socioeconomic Status Effect

As described previously, maternal interaction with an infant with a cochlear implant and an additional disability can cause stressful communication attempts; however, results of this study indicate that the disability is not the sole cause of the stress. One major component of the stress was the SES of the family observed. When evaluating maternal interaction with an infant with a cochlear implant and ASD, it is important to understand the environment that the infant has grown up in, as well as what resources and treatments the infant has had access to before or after diagnosis. To acquire the most accurate information, the parents' SES can be taken into consideration.

There are varying views and opinions in the research about how SES and rate of ASD in infants are related. According to Rai and colleagues (2012), epidemiological studies in the United States often find a relationship between

higher SES and a diagnosis of ASD, whereas studies from other countries with universal health care, such as Sweden, reveal a correlation between lower SES and a diagnosis of ASD. Rai and colleagues discovered that infants with ASD were more than likely to come from families with lower income, as well as from families with parents that work in manual occupations or unskilled manual labor. The study was administered in Sweden, so the population that was studied is an important factor in the results. Swedish parents and infants have access to free universal health care, which includes routine screenings and easier access to diagnosis and treatment of disorders, such as ASD. Similarly, Fujiwara (2013) found a correlation between lower SES and ASD in Japan, another country with access to free universal health care. After seeing the results from the Japan study compared to results in the United States, Fujiwara associates the findings of the U.S.-based studies (higher SES and ASD) with the healthcare system. Families of higher SES often have higher education levels, higher income, and better access to diagnosis and treatments of ASD at earlier ages than do those of a lower SES. With those comparisons in mind, it is understandable that the United States would see a relationship between higher SES and ASD, as many infants with lower SES could have never been diagnosed, which would exclude them from any studies or research compiled in the United States.

SES can also be indicative of the infant's ability to process skills for language development and the infant's access to therapy or strategies to combat issues pertaining to ASD and issues pertaining to hearing loss and cochlear implants. According to Fernald, Marchman, and Weisleder (2012), significant differences in vocabulary and language development exist between children of low- and high-SES families by 18 months of age, and a gap of 6 months' development exists between the two groups by 24 months of age with regard to language development. When adding in the difficulty of hearing loss and ASD, this discrepancy can become even more apparent in an infant's ability to communicate effectively with his or her parents, lowering the ability to have a successful parental interaction.

Environmental Factors

Extended television and media use in the home negatively affected the communication attempts made by parents during the study. Previous research has suggested that the effect of media usage can vary based on SES of the family, as well as on the age at which the infant is exposed. Mendelsohn and colleagues (2008) completed a study on the impact of infant television use on interactions in low-SES

households. The goal of the study was to determine the percentage of infants who watched television in low-SES households compared to high-SES households, as well as how the interactions between the infant and parent were affected by the early exposure to television. Although television use is not recommended until at least two years of age, according to the American Academy of Pediatrics, many parents allow their infants to watch television because of the entertainment and perceived educational programming shown on child-centered television stations (Mendelsohn et al., 2008).

In their study, Mendelsohn and colleagues (2008) found that 96.8% of the low-SES mothers reported daily media exposure in their household, with the average exposure being at least 60 minutes per day, and exposure of television seen most in parents with lower levels of education and familial income. The results also indicated that interactions were reported most during educational child-oriented programs (42.8%) and that about half of the infant's exposure was toward programs not aimed for children. Even with a higher interaction based in educational child-oriented programming, however, the study determined that infant-directed educational programming was not a good substitute for co-viewing and verbal interaction, claiming that increased television use (even when it seems educational) is not beneficial to the infant's overall development. Even when infants watch education-based programming, the need for increased interaction and discussion during the program exists. For example, it would be more beneficial for the infant's development if the parent watched the program, too, allowing a conversation and educational opportunities to emerge around the program, than if the parent allowed the infant to view the program alone. Increased television use without measures to counteract the potential developmental issues (i.e., decreased verbal interaction, loss of focus to other objects or people due to focus on television, limited exposure to reading and play) can have a negative effect on an infant's language and social development. Low SES is only one factor related to increased television use, however, and is not always indicative of delayed development or of acquisition of disorders.

All disabilities observed in the study (ASD, CMV, and global delay) can adversely affect communication and an infant's ability to interact with others. Early exposure to media usage can therefore cause a delay in development and acquisition of language. Heffler and Oestreicher (2016) demonstrated how media affected infants with ASD: Since increase of television access starting around the 1980s and the even higher level of access in the 1990s and 2000s, ASD diagnosis in infants has risen, potentially demonstrating the correlations between ASD and increased

television use. Infants are naturally attracted to media, without having an understanding of social interaction. For example, Heffler and Oestreicher (2016) state, increased television exposure creates a lack of understanding of real-life social interaction, which means that when the infant watches the actor on the television screen and tries to smile, coo, provide joint attention (sharing focus), or interact with a conversation (turn taking, eye contact, etc.), the infant experiences no interaction back. This lack of back-and-forth interaction can both confuse and discourage the infant, resulting in the infant stopping attempts at social interaction and lacking the motivation to communicate with the television actors or real-life people, such as their parents. The authors state that the “socially disengaged infant” would continue to lose shared attention opportunities and lack the ability to learn from his or her environment and develop language. Interest in interactive speech would be diminished, and eventually, the infant would stop attending toward parents or other individuals in social interactions, resulting in a bigger developmental delay in language (Heffler and Oestreicher, 2016). Heffler and Oestreicher continue to explain that an infant who did not orient during a social interaction would be unlikely to partake in imitation and turn taking, which are key cues when evaluating ASD.

Parental Interaction and Cochlear Implants

When evaluating paternal interaction, research from Broesch and Bryant (2017) suggests, it is important to understand the differences and variation in paternal interaction, as it can affect later language outcomes, similar to maternal interaction. When mothers speak to infants, they often change their speech compared to how they talk with adults; however, in fathers’ speech, differences arise because of societal factors rather than age of the communication partner. The researchers determined that when communicating with infants, fathers often modified their acoustic features of speech (e.g., pitch) based on their SES (low, average, or high). Broesch and Bryant suggest that fathers in small-scale societies “emphasize relationships and emotional attunement” while fathers in urban societies “focus on language learning and formal education.” These findings indicate that fathers use IDS differently based on their own upbringings or on the cultural groups with which they are currently associated. Although Broesch and Bryant’s study does not involve infants with hearing loss, it is still important to understanding the basis of parental interaction and how fathers may differ in interactions based on their societal situation, which can affect how the infant receives and acquires language. Whether the mother or father is communicating

with the infant, when hearing loss is involved, it is imperative that the parents learn effective ways to communicate to provide optimal language learning.

Conclusion

Parent interaction was not negatively affected by only the difficulty of the additional disability but rather by a combination of factors, including the disability, SES, maternal and paternal education, and the home environment. The prominent example in the study was the ASD-and-cochlear implant dyad. The family had a low SES, lower maternal and paternal education (the mother completing only ninth grade and the father with a high school diploma or GED equivalent), extensive media and television use in the home, and a disability that has proven to affect language and communication. The parental interaction also played a role, as the father was more involved in the daily interaction than the mother because he stayed home with the infant. The combination of factors caused the parental interaction in this dyad to be less engaging than in their similar cochlear implant and additional disability counterparts. The factors have been shown in research to have a negative effect on language and vocabulary growth, further stunting an efficient interaction between the parent and infant.

Because this study is based on a selective and limited number of participants, further research would need to be done to determine if the results stem from the factors included or if the small sample size and limited disabilities play a role. In the future, it would be beneficial to compare the ASD-and-cochlear implant dyad of low SES to a similar dyad of high SES and caregiver education to see if those factors did indeed cause the decreased communication. As of the time of this paper's publication, however, no dyad in the NIH-NIDCD funded research study at The Ohio State University meets that criterion, though that would be the ideal next step.

References

- Bayley, N. (2005). *Bayley Scales of Infant and Toddler Behaviors*. San Antonio, TX: Pearson Early Childhood.
- Beer, J., Harris, M., Kronenberger, W., Holt, R., & Pisoni, D. (2012). Auditory skills, language development, and adaptive behavior of children with cochlear implants and additional disabilities. *International Journal of Audiology, 51*, 491–498. doi:10.3109/14992027.2012.664291
- Bentenuto, A., De Falco, S., & Venuti, P. (2016). Mother-child play: A comparison of autism spectrum disorders, Down syndrome, and typical development. *Frontiers in Psychology, 7*(1829), 1–9. Retrieved from <http://doi.org/10.3389/fpsyg.2016.01829>
- Broesch, T., & Bryant, G. (2017). Fathers' infant-directed speech in small-scale society. *Child Development, 89*(2), 29–41. doi:10.1111/cdev.12768
- Choo, D., & Dettman, S. (2016). Video analysis of mother-child interactions: Does the role of experience affect the accuracy and reliability of clinical observations? *Deaf & Education International, 18*(1), 13–24. Retrieved from <https://doi.org/10.1179/1557069X15Y.0000000009>
- Corps, R., Gambi, C., & Pickering, M. J. (2018). Coordinating utterances during turn-taking: The role of prediction, response preparation and articulation. *Discourse Process, 55*(2), 230–240. Retrieved from <https://doi.org/10.1080/0163853X.2017.1330031>
- Fagan, M., Bergeson, T., & Morris, K. (2014). Synchrony, complexity, and directiveness in mothers' interactions with infants pre- and post-cochlear implantation. *Infant Behavior and Development, 37*(3), 249–257. Retrieved from <https://doi.org/10.1016/j.infbeh.2014.04.001>
- Faras, H., Ateeqi, N., & Tidmarsh, L. (2010). Autism spectrum disorders. *Annals of Saudi Medicine, 30*(4), 295–300. doi:10.4103/0256-4947.65261
- Fernald, A., Marchman, V., & Weisleder, A. (2012). SES differences in language processing skill and vocabulary are evident at 18 months. *Developmental Science, 16*(2), 234–248. Retrieved from <https://doi.org/10.1111/desc.12019>

- Fujiwara, T. (2013). Socioeconomic status and the risk of suspected autism spectrum disorders among 18-month old toddlers in Japan: A population-based study. *Journal of Autism Developmental Disorders*, *44*(6), 1323–1331. doi:10.1007/s10803-013-1988-3
- Heffler, K., & Oestreich, L. (2016). Causation model of autism: Audiovisual brain specialization in infancy competes with social brain networks. *Medical Hypotheses*, *91*, 114–122. doi:10.1016/j.mehy.2015.06.019
- Ma, W., Golinkoff, R., Houston, D., & Hirsh-Pasek, K. (2011). Word learning in infant- and adult-directed speech. *Language Learning and Development*, *7*(3), 185–201. doi:10.1080/15475441.2011.579839
- Meinzen-Derr, J., Wiley, S., Grether, S., & Choo, D. I. (2011). Children with cochlear implants and developmental disabilities: A language skills study with developmentally matched hearing peers. *Research in Developmental Disabilities*, *32*(2), 757–767. Retrieved from <https://doi.org/10.1016/j.ridd.2010.11.004>
- Mendelsohn, A., Berkule, S., Tomopoulos, S., Tamis-LeMonda, C. S., Huberman, H., Alvir, J., & Dreyer, B. (2008). Infant television and video exposure associated with limited parent-child verbal interactions in low socioeconomic status households. *Archives of Pediatrics and Adolescent Medicine*, *162*(5), 411–417. doi:10.1001/archpedi.162.5.411
- Miller, J., Andriacchi, K., & Nockerts, A. (2015). Systematic Analysis of Language Transcripts [Computer software]. Middleton, WI: SALT Software LLC.
- Mithyantha, R., Kneen, R., McCann, E., & Gladstone, M. (2017). Current evidence-based recommendations on investigating children with global developmental delay. *Archives of Disease in Childhood*, *102*(11), 1071–1076. doi:10.1136/archdischild-2016-311271
- Rai, D., Lewis, G., Lundberg, M., Araya, R., Svensson, A., Dalman, C., Carpenter, P., & Magnusson, C. (2012). Parental socioeconomic status and risk of offspring autism spectrum disorders in Swedish population-based study. *Journal of the Academic Academy of Child and Adolescent Psychiatry*, *51*(5), 467–476. doi:10.1016/j.jaac.2012.02.012
- Sacrey, L. A., Bryson, S., & Zwaigenbaum, L. (2013). Prospective examination of visual attention during play in infants at high-risk for autism spectrum

- disorders: A longitudinal study from 6 to 36 months of age. *Behavioural Brain Research*, 256, 441–450. Retrieved from <https://doi.org/10.1016/j.bbr.2013.08.028>
- Sarant, J., & Garrard, P. (2013). Parenting stress in parents with cochlear implants: Relationships among parent stress, child language, and unilateral versus bilateral implants. *Journal of Deaf Studies and Deaf Education*, 19(1), 85–106. Retrieved from <https://doi.org/10.1093/deafed/ent032>
- Sparrow, S., Cicchetti, D., & Balla, D. (2005). *Vineland Adaptive Behavior Scales* (2nd ed.). San Antonio, TX: Pearson Clinical Psychology.
- Templin, M. (1957). *Certain language skills in children; their development and interrelationships*. Minneapolis: University of Minnesota Press.
- Williamson, G. (2014, January 29). *Mean length of utterances*. Retrieved from <https://www.sltinfo.com/mean-length-of-utterance/>
- Zimmerman, I. L., Steiner, V., & Pond, R. E. (2002). *Preschool Language Scale* (4th ed.). Minneapolis, MN: Pearson Assessments.
- Zimmerman-Phillips, S., Robbins, A. M., & Osberger, M. J. (1997). *Meaningful Auditory Integration Scale (MAIS)/Infant Toddler: Meaningful Auditory Integration Scale (IT-MAIS)*. Sylmar, CA: Advanced Bionics.
- Zuylen, W., Hamilton, S., Naing, Z., Hall, B., Shand, A., & Rawlinson, W. (2014). Congenital cytomegalovirus infection: Clinical presentation, epidemiology, diagnosis and prevention. *Obstetric Medicine*, 7(4), 140–146. Retrieved from <https://doi.org/10.1177/1753495X14552719>

CYBER JIHADISM: AN ANALYSIS OF HOW THE CYBERSPHERE HAS ALTERED ISLAMIC TERRORISM

SIMON SPANGENBERG, UNIVERSITY OF NEW MEXICO

MENTOR: MARIE VASEK

Between 2011 and 2015, more than 30,000 foreigners, including more than 4,000 Westerners, have joined the ranks of ISIS in the Syrian conflict (Schmitt & Sengupta, 2015). Between 2000 and 2018, 91% of the total victims of terror attacks in Europe were accounted for by Islamic terrorists, causing a total of 753 fatalities in that time frame (Le Figaro, 2019). Numerous studies have statistically demonstrated a continuous surge of new recruits in Islamic terrorist groups such as ISIS since the beginning of the millennium. Carter, Maher, and Neumann (2014) attribute this trend to the expansion of technological possibilities in the cybersphere. They claim that the conflict in Syria is arguably one of the first live-documented conflicts on social media and video streaming platforms: “In the minds of the foreign fighters, social media is no longer virtual: it has become an essential facet of what happens on the ground” (Carter et al., 2014, p. 1). Propaganda and recruitment encompass only a portion of the online Islamic extremism threat, however. Training also represents a significant role that Islamic terrorism has on the cybersphere (Pawlak, 2015). Digital tools are increasingly used to train foreign recruits. This is most prominently illustrated by the Al-Qaeda-created online magazine *Inspire*, which led to the making of two bombs that killed three and injured approximately 300 in the Boston Marathon in April 2015 (Lemieux, Brachman, Levitt & Wood, 2014). In this paper, we review and analyze the three above-mentioned major components of online Jihad: propaganda, recruitment, and training. Through related work, we propose a formal description and explanation for the reasons of past superiority of online Islamic terrorism.

The fight against Islamic terrorism is extremely complex and requires historical understanding of the roots of current conflicts in the Middle East. Understanding why new recruits join the ranks of Islamic terrorist groups is crucial for efficiently fighting online terrorism (Rosenblatt, 2019); thus, we provide a brief historical review of ongoing conflicts in the Middle East and the emergence of radical groups.

Although fighting online terrorism is often neglected, the need to do so is at an all-time high. Overlooking this necessity has undeniably contributed to the

recent surge of attacks and has perpetuated the formation of powerful groups such as Al-Qaeda and ISIS (General Intelligence and Security Service, 2012). Although most nations, organizations, and even independent hacking groups called “hacktivists” have considerably increased their attention toward online terrorism, a significant amount still needs to be done to gain the upper hand in the online war of terror (Ghost Security, 2015). Brantly (2017) notices that a significant challenge faced by nation-states and governments lies in the innovation and adaptation of extremist groups’ digital security. In this paper, we discuss several methods to surveil and fight online terrorism. We identify challenges and promising aspects concerning the future of the fight against online terrorism. Finally, we offer a model of potential future threat landscapes related to Islamic radicalization in the cybersphere.

Background and Definitions

Islamic Terrorism Terminology and Definitions

Terrorism can be defined as the systematic use of violence to achieve political objectives. It is a tactical asymmetric fight to compensate for the incapacity of the weak to win over a stronger state opponent. Islamic terrorism includes a strong religious component derived from an extreme interpretation of the Quran, Sharia law, and various Hadiths, in which Islamic supremacy (i.e., establishment of a new worldwide Islamic caliphate) is viewed as the ultimate goal.¹ This goal is attained by conducting a *Jihad* (literally translated as “struggle” or “striving”), or holy war, against unbelievers (*kafir*). Islamic terrorism takes different forms and has multiple roots and origins going as far back as the 11th century CE.

Historical Review

To gain support from Arabic movements during World War I and to help defeat the Ottoman Empire, France and the United Kingdom promised to support the creation of an Arabic state after the war ended. Simultaneously, the British government issued the so-called Balfour Declaration supporting the establishment of “a national home for Jewish people” in Palestine (Kepel, 2004). After the fall of the Ottoman Empire, France and the United Kingdom betrayed their promise by secretly agreeing to partition the Arabic territories of the former Ottoman Empire under their respective colonial control. The period between World Wars I and II is consequentially characterized by the emergence of an Arabic nationalism and Islamism as well as by the development of Zionism (via different waves of

migration of Jewish people in Palestine). After World War II, the important oil resources of the region became a major component of the subsequent Cold War between the Soviet Union and the United States. The creation of Israel in 1948 ignited the war between the new Jewish state and its Arabic neighbors in support of the Palestinian people. This period was dominated largely by Palestinian terrorism.

An important development is the change of power in Iran in 1979 with the arrival of Ayatollah Khomeini. For the first time in the region, an Islamic Shia state was created, which introduced a new form of Islamic terrorism against Western states. Concurrently, the Soviet invasion of Afghanistan constituted a turning point in the development of modern Islamic terrorism. Weakened by the fall of the Shah in Iran, the United States would not allow the creation of a USSR satellite state in the region. Together with Saudi Arabia, the United States started supporting Muslim opponents and Afghan mujahideen (Islamic fighters) factions. The withdrawal from Afghanistan in 1989 resulted in the fall of the Soviet Union and the end of the Cold War. During the following years of civil war in Afghanistan, different Islamic groups were trained with the intention of exporting their newly gained skills to other parts of the world (notably Algeria, Bosnia, and Chechnya). Not gaining enough recognition, some groups—Al-Qaeda in particular—turned to global terrorism, September 11 being the most representative moment of this evolution.

The succeeding “War on Terror” on countries associated with Al-Qaeda, along with the killing of Abu Abdallah Usama bin Laden, has reduced the influence of this movement but has also given rise to a new and more violent group called ISIS/ISIL. In 2014, ISIS/ISIL, led by Abu Bakr al-Baghdadi, established a caliphate over a significant part of Iraq and Syria. During this period, the Islamic group conducted terrorist attacks on numerous countries, particularly in Europe (Paris, Brussels, Nice, London, Stockholm, etc.).

Online Jihad

The use of the online sphere as a platform for Jihad is endemic to Islamic terrorism and has exponentially increased in the past decade (Brantly, 2017). In 2005, Ayman al-Zawahiri (2nd General Emir of Al-Qaeda) openly denoted the media to be an inclusive part of the battlefield (Carter et al., 2014). Terrorist groups have successfully learned to use complex online tools that ensure anonymity and protection to communicate and coordinate their affairs. We recognize the materialization of this development through three main fundamentals: propaganda,

recruitment, and training. For each of these points, we identify several attack vectors exploited by Islamic terrorists, which have contributed to their ascendance in the online war of terror.

Propaganda

Based on related work, we detect a number of tools used by jihadists as means for diffusing motivational material, such as social media, media centers, online magazines, and video games. From the infamous video of American hostage Nick Berg's beheading by Abu Musab al-Zarqawi in 2004, to the use of social media and the creation of online magazines, Islamic extremists have exploited many different techniques to rally individuals to their cause. For instance, as Pawlak (2015) notes, Al-Qaeda has "openly encouraged cyber Jihad as a sacred duty of every Muslim and called upon its followers to hack western websites" (p. 1). This call has quickly been answered by a prominent British-Islamic figure called Abu Hussain al-Britani, also known as "TriCk," most notorious for hacking Tony Blair's account and joining the ranks of ISIL in 2013. Jihadi groups have quickly understood the influence of social media. Platforms such as Twitter, Facebook, and Instagram have allowed jihadists to share and promote their views. Berger and Morgan (2015) estimate that in September 2014, between 46,000 and 70,000 Twitter accounts were linked to ISIS. Several of these profiles reached thousands of followers, one particular example being the ISIS-affiliated Twitter account @reyardiraq, with more than 90,000 followers (Brantly, 2017).

Social media is also used as an outlet for newly emerged centralized media centers such as "al-Hayat," "al-Sahab," and "al-Furquan." These media centers often exhibit well-edited Islamic propaganda videos, using advanced technological cameras and drones to depict often severely contrasted sceneries. For instance, amongst the shocking films of beheadings, ISIS has crafted impressive video series such as *Harvest of the Soldiers*, which include almost weekly releases and updates of pure military advertising material (Zelin, 2019). The Islamic State (ISIS/ISIL) often contrasts its videos of strength and violence with displays of peace, happiness, and prosperity in its controlled cities. ISIS's efforts to portray a form of utopia to undermine the humanitarian crisis occurring in its occupied cities is verified through a study led by Tarabay, Shiloach, Weiss, and Gilat (2015), in which the authors found that 45% of the Islamic State's propaganda focuses on its endeavors to build and sustain the caliphate by portraying hospitals, charity work, agricultural projects, and roadworks.

Media outlets and forums have also allowed terrorist groups to publish new types of propaganda material, such as online magazines and video games (Al-Rawi, 2016). One of the most notorious examples is Al-Qaeda's online magazine *Inspire*, thought to be the work of English-speaking jihadi Anwar al-Awlaki, also known as the "bin Laden of the Internet" ("Online Preachers," 2011). Figure 1 depicts instructions given in the magazine relating to propaganda and wide distribution of the media.

MEDIA ADVICE: Throw the magazine onto forums. Muslim and non-Muslim forums alike. The FBI might be trying to bring down sites that host the magazine so mailing lists are an important way to get the magazine across.

Figure 1. Propaganda message given in the eighth issue of Al-Qaeda's online magazine *Inspire* (Zelin, 2019).

For the first time, Islamic extremist groups have implemented impressive technological tools to modernize their propaganda campaigns. As established in a study led by Al-Rawi (2016), groups such as ISIS base most of their marketing strategies on emphasizing simple ideological appeals,² greatly facilitated through the use of the cybersphere. Islamic terrorists build their media strategies on three main traits, as explained by Haroro J. Ingram (2014): the use of multidimensional and multiplatform approaches to instantaneously target individuals and enhance the scope and importance of messaging; the organization of narratives and deeds to amplify operational and strategic outcomes in the field; and the centrality of the Islamic State brand.

Recruitment

Patryk Pawlak (2015) notes that "the internet has not only altered traditional channels for radicalization and facilitated a two-way communication between terrorist organizations and their supporters, but also allowed for a change in planning, coordination and execution of attacks" (p. 1). The distribution of propaganda through social media is only the first step toward successful radicalization and recruitment (Al-Rawi, 2016). Jihadists tend to distrust platforms for direct communication and rely on more developed digital operational security (OPSEC) techniques to target specific individuals (Brantly, 2017). As soon as the first contacts have been made, jihadists rely on mobile messaging applications like Viber, Telegram, and Redphone to directly communicate with their potential

targets. Brantly (2017) observes in his study that high levels of online “safeguarding” are required for a potential recruit to make his way into terrorist groups. Through the analysis of thousands of posts in forums and social media, Brantly establishes a list of communication tools that are either positively or negatively regarded by extremists. The list of applications that are considered “safe to use” by jihadists includes but is not restricted to Signal, Linphone, Vimeo, Gmail, and Telegram. Unsafe tools include Skype, iCloud, and Tor Mail. A strong recognition is made on the Silent Phase software, which is often considered to offer “secure solutions for voice, browsing and messaging” (p. 91).

ISIS also regularly uses video games as a measure to radicalize younger individuals. Shooting game *Arma 3* includes a specific ISIS mod,³ easily accessible via online download (Scimeca, 2015). In addition, an adaptation of *Grand Theft Auto V* called “Salil al-Sawareem” (The Clanging of the Swords) was popularized in 2014. In this adaptation, the user takes control of a jihadist in his struggle to restore the caliphate and combat the infidels. Such means are clearly intended to target a younger set of individuals and idealize the daily life of an Islamic fighter. Al-Rawi (2016) notes that with high-definition video games and entertaining missions, the user is lured into believing that ISIS is a technologically advanced group fighting for genuine and authentic beliefs. Finally, ISIS also introduced a self-made Android application available for free download on the Google Store. “Dawn of the Glad Tidings” was a Twitter-based application that automatically posted ISIS-related tweets on the user’s account. Although the lifetime of this application was quite limited, Berger and Morgan (2015) and Stern and Berger (2016) noted that the application reached a peak of 40,000 tweets a day.

Training

Through the expansion of the online sphere, jihadists have rapidly discovered that the Internet is not only a place for radicalization, recruitment, and propaganda but also for knowledge sharing. In this section, we recognize two main attack vectors used by Islamic groups to train recruits in the cybersphere: digital protection vectors and military threat vectors.

Digital Protection Vectors.

Most of the general techniques required to maintain anonymity and privacy over the Internet are not generally known by the average user. Developing some techniques to preserve online security requires a minimum amount of training,

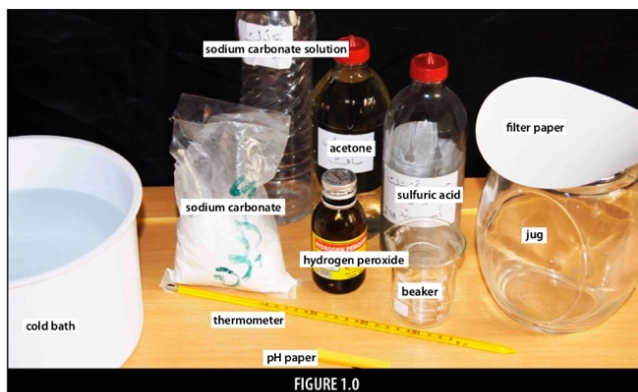
which, as Brantly (2017) notes, is often promoted by social media accounts linked to terrorist groups. For instance, the Telegram account @Software_ENG, also named Tiqani al-Dawlah al-Islamiyyah,⁴ has been known to post hundreds of training documents on forums and websites linked to implementing strong digital OPSEC techniques. Another instance is depicted by Mula'ib al-Assina's response to a question related to the use of Skype through Tor on the Minbar forum: "Skype is insecure, and Americans are recording every single call since 2008" (Brantly, 2017, p. 86). It is important to note that most of the material covered and questions asked on such platforms are quite trivial and do not dig deep into digital operational security. Nevertheless, such activity clearly indicates a high interest and concern from jihadists about digital OPSEC and illustrates that the online sphere and cybersecurity techniques have become a crucial asset for their operations.

Military Threat Vectors

The emergence of certain media outlets and online document-sharing platforms has allowed the creation of so-called do-it-yourself terrorism (Pawlak, 2015). This modern practice of Jihad is most prominently illustrated through online journals and magazines released in several volumes by groups such as Al-Qaeda and ISIS. Al-Qaeda is one of the first groups to release easy-to-access online training documents, like the journal *al-Battar*,⁵ which served predominantly as a virtual training camp, encouraging weapons of mass destruction and teaching explosive handling and kidnapping techniques, amongst many others (Cohen-Almagor, 2016). A more notorious example of Al-Qaeda's online training tools relates to the 17-volume online magazine *Inspire*. *Inspire* became influential throughout the world as it was fully aimed at English readership (i.e., Western recruits). Studying the influence of *Inspire*, Lemieux et al. (2014) note that the magazine seems to target a "less intellectually engaged audience" around the world, particularly in Australia, the United Kingdom, and the United States. Lemieux et al. (2014) also note that one of the reasons for the magazine's infamy relates to the "Open Source Jihad" section. This section of *Inspire* covers in great detail a variety of skills to learn—from weapon handling to bomb making—and was allegedly used by Dzhokhar Tsarnaev and his brother, Tamerlan, in the 2013 Boston Marathon bombings. Figure 2 illustrates an extract from the step-by-step process of making an acetone peroxide bomb in the "Open Source Jihad" section of *Inspire*'s sixth volume. The primary explosive material used in the Paris and Brussels bombings was triacetone triperoxide, a trimer form of the mixture of acetone and hydrogen peroxide (Alfred, 2016). The aforementioned arguments clearly illustrate the fact

that today, to pursue Jihad, modern terrorists require only a sufficient Internet connection.

FIGURE 1.0
All of the parts you will be required to have are shown. What is not shown here is that you can choose to have any kind of dropper for the experiment.



REMEMBER

To make sodium carbonate solution, mix sodium carbonate with water as shown in step 7.

IMPORTANT

Make sure to wear your safety gear that includes gloves and goggles. If your hair is long, tie it back. If any of the chemicals get on your hands, make sure to wash it off immediately. After you're done with the experiment, wash the entire area and the items thoroughly.

HINT



For extra precaution, keep large chunks of ice in the cold bath so as to maintain the cold temperature.

Preparation:

The rule is to use 6 times as much the quantity of pure acetone with its equivalent pure H_2O_2 . So if you are using 20ml 100% H_2O_2 , you would add to it 120ml 100% acetone. The acid is added to facilitate the reaction.

So for 3% H_2O_2 : Use 50ml H_2O_2 + 9ml acetone + 10-20ml Sulfuric acid. See Table 1.1 below for details.

You will need a glass beaker, ice cold water (cold bath) and a thermometer.

1. Add the needed amount of acetone according to the concentration of the H_2O_2 as seen in Figure 1.1. Refer to Table 1.1 for the method of pouring.
2. Pour H_2O_2 into a beaker.



FIGURE 1.1

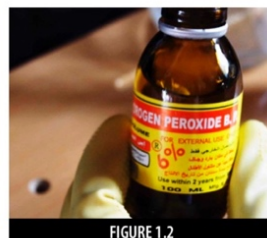


FIGURE 1.2

Ingredients in ml	3% H_2O_2	6% H_2O_2	18% H_2O_2	30% H_2O_2
H_2O_2	50ml	50ml	50ml	50ml
Acetone	9ml	18ml	54ml	90ml
Sulfuric acid*	10-20ml	20ml	20ml	20ml

Table 1.1

*The quantities above are for 98% sulfuric acid. If you are using a weaker concentration, increase the amount of acid. You may also substitute sulfuric acid for hydrochloric acid.

Inspire | Al-Malahem Media

Figure 2. Extract from the step-by-step procedure of the making of an acetone peroxide bomb. This figure appeared in the sixth issue of Al-Qaeda's online magazine Inspire and was part of the "Open Source Jihad" section (Zelin, 2019). For security purposes, the rest of the instructions have been omitted here.

The Fight against Online Islamic Terrorism

Since the early 2010s, the threat of online terrorism has become publicly acknowledged and many entities have significantly increased their digital counterterrorism measures. To analyze the fight against online Islamic terrorism, we focus our research on three main actors: governments and international organizations, companies, and independent groups. For each of these groups, we discuss policies and measures taken to tackle online terrorism. We also consider newly emerging groups that have considerably helped nation-states improve their trailing position in the online war of terror.

Governments and International Organizations

The international coalition against online terrorism is structured around three main pillars: “constraining the use of the internet by jihadi organizations,” “strengthening de-radicalization efforts,” and “limiting access to funding” (Pawlak, 2015, p. 2). Nation-states’ efforts to combat online terrorism via several platforms have drastically amplified over past years. Initial government responses included social media campaigns⁶ and unsuccessful countermessaging techniques (“Digital Counterterrorism,” 2018). Although many of these attempts have been unable to compete against the propaganda tactics implemented by jihadists so far, international initiatives continue to grow and challenge the spread of online terrorism.

Many nation-states recognized that cutting Islamic extremist groups’ financing would ultimately result in those groups’ extinction. This led to the 2015 UN Resolution 2199, which condemns any form of trade associated with groups such as Al-Qaeda (“Unanimously Adopting,” 2015). A few government initiatives and offensive responses to Islamic terrorism have proven successful, however. For instance, in 2016, the National Security Agency and the United States Cyber Command successfully conducted a joint offensive operation called Glowing Symphony, with the purpose to disrupt and deny ISIS’s ability to coordinate and conduct attacks against the United States and its allies (Martelle, 2018). This operation is considered one of the most significant and successful cyber offensive operations undertaken by the United States.

Companies

A most recent initiative, called the Christchurch Call, led by New Zealand's prime minister Jacinda Ardern and French president Emmanuel Macron, aims to encourage all major tech companies to eliminate any form of terrorism and violent extremist content online (Roy, 2019). Major companies are playing a crucial role in the fight against cyber Jihad. As most of the propaganda content flows through social media, many of these companies recognize the fight against online extremism as a responsibility and a duty. In 2015, Twitter announced the suspension of 10,000 ISIS-linked accounts in one day (Gladstone, 2015). Two years later, YouTube announced the removal of the lectures and sermons of prominent Islamic preacher Anwar al-Awlaki (Wallace & Townsend, 2017). Furthermore, Google's recent Jigsaw Project presents a modern face in combatting Islamic propaganda and dismantling extremism networks. This project aims to be "a platform for former violent extremists to collaborate, in order to prevent young people from joining extremism groups" ("Jigsaw," n.d).

Independent Groups

The rise in online Islamic terrorism has also resulted in the enlisting of independent hacking groups, also called hacktivists. Following the Paris Charlie Hebdo attacks in 2015, hacktivist group Anonymous publicly declared war on ISIS through the #OpISIS campaign and removed 20,000 ISIS-related Twitter accounts (Rogers, 2015). Another prominent group engaged in the battle against cyberterrorism is Ghost Security Group. To date, Ghost Security Group claims to have identified more than 100,000 extremist social media accounts used primarily for recruitment, and to monitor more than 200 known violent extremist websites ("Ghost Security," n.d).

Ways Forward

Beyond a more stringent international and national legal order and the effective involvement of online platforms and social media, the increasing level of threat sophistication of the cybersphere and its mastering by terrorist groups require constant adaptation. Since the 2013 Snowden leaks, companies have significantly increased their use of robust encryption methods in their consumer-communication technologies, which has strongly challenged authorities to efficiently track terrorists online ("Digital Counterterrorism," 2018). Brantly (2017) described the necessity behind jihadists' adaptation and innovation on current online

technologies. Strong digital OPSEC has become a vital need for groups such as Al-Qaeda and ISIS to exist. It is therefore natural to assume that the future war on terror will occur mainly online. Social media and forums are only a small part of the danger that Islamic terrorist groups represent, and as technological means expand, so does the jihadi threat landscape.

Recent findings and developments seem to suggest that artificial intelligence will become a major asset for tracking, monitoring, and surveilling Islamic extremism activities on the Internet. According to a report published by the Capgemini Research Institute, 56% of 850 surveyed senior executives in cybersecurity claim that their security analysts are overwhelmed by the increasingly sophisticated threat levels (Tolido, Van Der Linden, Thieullent, & Frank, 2019). The need to further incorporate automation and artificial intelligence as tools for detection and response to cyber threats has become crucial. Through the development of machine learning and data-mining algorithms, companies and public authorities could potentially classify data collected from past attacks to model trends that would determine high-risk scenarios and prevent future attacks (Beuchelt, 2020). Beuchelt (2020) notes that, “using temporal analytics as well as structured and unstructured data analysis and integration, companies can build complex social media and other open source intelligence models to predict future attacks” (para. 10). Counter Extremism Project’s eGlyph technology and Google’s recent Jigsaw Project both illustrate new types of automated mass-tracking algorithms, which, if used properly, could lead to astonishing positive results (“How CEP’s eGLYPH Technology Works,” 2016).

Link analysis (defined as a method to evaluate relationships between nodes in a network) is an interesting technique used to study information surrounding high-stake targets (Carafano, 2005). This method could allow efficient large-scale analysis of a suspect’s relationships as well as his or her links to a terrorist organization. All of the aforementioned implementations, however, require a significant dependence on available and structured data. Although the fields of machine learning, data mining, and data analysis are exponentially growing, they still face challenges when trying to process natural languages or when manipulating nonstructured data such as images, text mixtures, videos, and sensor information (Carafano, 2005).

Online security is often considered a “cat and mouse” game. As security strengthens, so do threats and attacks. Although artificial intelligence and data-analysis algorithms could be used to secure systems and fight online terrorism, these techniques could also be used by Islamic terrorists to widen their online range

and social-engineering techniques. For instance, artificial intelligence could be deployed to enhance terrorists' online propaganda campaigns by implementing an algorithm that sends tweets faster and with a higher success rate than a human could (Tolido et al., 2019). The need to recognize that the threat vectors of terrorist attacks will drastically change in the future is of paramount importance ("Cyberterrorism," 2009). Because of the interconnectivity revolution of the past few decades, critical infrastructures such as hospitals, power plants (specifically nuclear plants), transportation infrastructures, and banks are prone to becoming terrorists' next targets of value. There is no definite answer to ensure protection against terrorist threats in the cybersphere, but cooperation and intelligence sharing will be critical for the containment of such threats (Collins, n.d).

The need for public and law enforcement authorities to design adequate and reactive cross-border cooperation tools has been highlighted by the European Union after the series of terrorist attacks that hit a number of its member states in 2015 and 2016. In September 2018, the European Commission adopted a legislative proposal on "preventing the dissemination of terrorist content online" (European Commission, 2018). The regulation introduces a removal order that can be issued as an administrative or judicial decision by a competent authority in a member state. In such cases, the hosting service provider is obliged to remove the content or to disable access to the content within one hour. The regulation requires hosting service providers, where appropriate, to take proactive measures proportionate to the level of risk and to remove terrorist material from their services, including through the deployment of automated detection tools. Failure to act within an hour after a removal order has been placed by a member state could result in fines of up to 4% of the hosting service provider's annual revenue ("European Parliament," 2019).

Opponents of this proposal—such as Tim Berners-Lee, founder of the World Wide Web—claim that the proposed regulation is an attack on freedom of speech and would impair the Internet in Europe without strengthening the fight against online terrorism (Baker, Berners-Lee & Cerf, 2019). The proposal is still in discussion between the European Union's legislators because of concerns expressed by the European Parliament about possible abuses of removal orders and restriction of freedom of speech (Creighton, 2019).

Despite these criticisms, adoption of the regulation could represent a major milestone in the fight against online Islamic terrorism. Lucinda Creighton (2019), Senior Advisor at the Counter Extremism Project, explained: "Of the 1.5 million videos of the attack in Christchurch, New Zealand, that were detected and

eventually removed by Facebook, only 1.2 million were screened and blocked by Facebook's software before being uploaded. This left 300,000 videos uploaded to the platform for users to see" (para. 2).

The way companies and public authorities shape new regulations and approach technical advancements will undoubtedly be crucial for the future of online counterterrorism. Collins (n.d) argues that the way we approach online counterterrorism must change, as we need to adapt to new rules, new technologies, and new players. Ultimately, technical developments and legal frameworks will need to properly balance public security needs with freedom of speech and individual data-protection requirements.

Conclusion

In this paper, we have provided a cohesive narrative of the way Islamic terrorists use the cybersphere to conduct their Jihad and how nation-states have reacted to the threat posed by such groups. We have selectively reviewed online methods used by Islamic groups in the "Online Jihad" section by analyzing three key components to their success—namely propaganda, recruitment, and training. Our analysis illustrates that Islamic terrorist groups' influence over the cybersphere is as significant as it has ever been and has undeniably led to major attacks over the past decade. Our findings also indicate that Islamic groups were evidently leading the online war of terror over the past few years as most nation-states failed to recognize the online threat that Islamic extremism represents.

We then focused our study on ways in which the fight against online terrorism is conducted, in the section called "The Fight against Online Islamic Terrorism," by identifying three major attack vectors: governments and international organizations, companies, and independent groups. Our findings suggest that international response to online jihadism has significantly increased over the past decade, considerably decreasing the gap between nation-states and terrorist groups in the cybersphere.

Finally, we have identified, in the section "Ways Forward," several challenges and threats that online terrorism will pose in the future. Although findings and newly built tools to counter online terrorism offer reason for optimism, new threats emerge at a similar rate through the expansion of technological advancement. Future work will have to efficiently recognize the importance of cybersecurity related to the online war of terror and the impact that neglecting it has had on the world. Containing online resources that advance terrorism is an

increasingly critical task, since a simple video, a brief message, or a single tweet could represent an individual's turning point between peace and terrorism.

Notes

¹ It is important to note that Islamic terrorism is based on a radical interpretation of the Quran that is, in general, not representative of the Islamic religion. The term "Islamic terrorism" is highly politicized and should by no means serve as a reference to Islamic tradition. It is used throughout this article exclusively as a means to describe violent groups who claim religious motivations behind their attacks.

² One example includes the use of a black banner. The black banner contains many different Islamic references. For instance, it is assumed that a black banner was used when Abu Muslim led the Abbasid Revolution in 747 CE.

³ Video game mods are defined as "short modifications" of the game by external parties such as fans or players.

⁴ Also known as Islamic State Tech.

⁵ Also known as *The Sharp-Edged Sword*.

⁶ One notable example relates to the "Think Again Turn Away" social media campaign, launched by the US Department of State, which accumulated a modest 44,000 followers on Twitter and Facebook combined (General Intelligence and Security Service, 2012).

References

- Alfred, C. (2016, March 23). What the bombs used in Brussels reveal about the attacks. *Huffington Post*. Retrieved from https://www.huffpost.com/entry/bombs-brussels-attacks_n_56f2a25fe4b0c3ef52174c1d
- Al-Rawi, A. (2016). Video games, terrorism, and ISIS's Jihad 3.0. *Terrorism and Political Violence*, 30(4), 740–760. doi:10.1080/09546553.2016.1207633
- Baker, M., Berners-Lee, T., & Cerf, V. (2019). EU terrorist content regulation will damage the internet in Europe without meaningfully contributing to the fight against terrorism. *Politico*. Retrieved from <https://www.politico.eu/wp-content/uploads/2019/04/TCO-letter-to-rapporteurs.pdf>
- Berger, J. M., & Morgan, J. (2015, March). The ISIS Twitter census: Defining and describing the population of ISIS supporters on Twitter. *The Brookings Project on U.S. Relations with the Islamic World*, 20. Retrieved https://www.brookings.edu/wp-content/uploads/2016/06/isis_twitter_census_berger_morgan.pdf
- Beuchelt, G. (2020, February 6). Opinion: AI and machine learning will power both cyber offense and defense in 2020. *Security Ledger*. Retrieved from <https://securityledger.com/2020/02/opinion-ai-and-machine-learning-will-power-both-cyber-offense-and-defense-in-2020/>
- Brantly, A. (2017). Innovation and adaptation in jihadist digital security. *Survival*, 59(1), 79–102. doi:10.1080/00396338.2017.1282678
- Carafano, J. (2005, June 6). The future of anti-terrorism technologies. Retrieved from <https://www.heritage.org/homeland-security/report/the-future-anti-terrorism-technologies>
- Carter, J. A., Maher, S., & Neumann, P. R. (2014). *#Greenbirds: Measuring importance and influence in Syrian foreign fighter networks*. Retrieved from the International Centre for the Study of Radicalisation and Political Violence website: <https://icsr.info/wp-content/uploads/2014/04/ICSR-Report-Greenbirds-Measuring-Importance-and-Influence-in-Syrian-Foreign-Fighter-Networks.pdf>

- Cohen-Almagor, R. (2016). Jihad online: How do terrorists use the internet? In F. C. Freire, X. R. Araujo, V. A. Martinez, & X. L. Garcia (Eds.), *Advances in Intelligent Systems and Computing: Vol. 503. Media and metamedia management* (pp. 55–66). doi:10.1007/978-3-319-46068-0_8
- Collins, B. C. (n.d.). The future of cyberterrorism: Where the physical and virtual worlds converge. Retrieved from <http://www.crimere-search.org/library/Cyberter.htm>
- Creighton, L. (2019, December 13). We need to stop pretending that we do enough to curtail terrorists' online influence. Retrieved from <https://www.euronews.com/2019/12/13/we-need-to-stop-pretending-that-we-do-enough-to-curtail-terrorists-online-influence-view>
- Cyberterrorism: A look into the future. (2009). *Infosecurity*, 6(6), 34–37. doi:10.1016/s1742-6847(09)70018-7
- Digital counterterrorism: Fighting jihadists online. (2018, March 9). Retrieved from <https://bipartisanpolicy.org/report/digital-counterterrorism-fighting-jihadists-online/>
- European Commission. (2018, September 12). Proposal for a regulation of the European Parliament and of the council on preventing the dissemination of terrorist content online. Retrieved from <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52018PC0640&from=EN>
- European Parliament approves amendments to draft “terrorist content” legislation. (2019, April 24). Retrieved from <https://www.perkinscoie.com/en/news-insights/european-parliament-approves-amendments-to-draft-terrorist-content-legislation.html>
- General Intelligence and Security Service. (2012, January). *Jihadism on the Web: A breeding ground for Jihad in the modern age*. Ministry of the Interior and Kingdom Relations of the Netherlands.
- Ghost Security Group. (n.d.). Retrieved from <https://ghostsecuritygroup.com/>.
- Ghost Security Group: 'Spying' on Islamic State instead of hacking them. (2015, November 23). BBC Trending. Retrieved from <https://www.bbc.com/news/blogs-trending-34879990>

- Gladstone, R. (2015, April 10). Twitter says it suspended 10,000 ISIS-linked accounts in one day. *New York Times*. Retrieved from <https://www.nytimes.com/2015/04/10/world/middleeast/twitter-says-it-suspended-10000-isis-linked-accounts-in-one-day.html>
- How CEP's eGLYPH technology works [video]. (2016, December 8). Retrieved from <https://www.counterextremism.com/video/how-ceps-eglyph-technology-works>
- Ingram, H. J. (2014). Three traits of the Islamic State's information warfare. *The RUSI Journal*, 159(6), 4–11. doi:10.1080/03071847.2014.990810
- Jigsaw. (n.d.). Retrieved from <https://jigsaw.google.com/projects/#against-violent-extremism-network>
- Kepel, G. (2004, December). Le terrorisme islamiste est né en Afghanistan. Retrieved from <https://www.lhistoire.fr/«-le-terrorisme-islamiste-est-né-en-afghanistan-»>
- Le Figaro with AFP. (2019, March 5). Publication d'un "livre blanc et noir du terrorisme en Europe." Retrieved from http://www.lefigaro.fr/flash-actu/2019/03/05/97001-20190305FILWWW00190-publication-d-un-livre-blanc-et-noir-du-terrorisme-en-europe.php?redirect_premium
- Lemieux, A. F., Brachman, J. M., Levitt, J., & Wood, J. (2014). InspireMagazine: A critical analysis of its significance and potential impact through the lens of the information, motivation, and behavioral skills model. *Terrorism and Political Violence*, 26(2), 354–371. doi:10.1080/09546553.2013.828604
- Martelle, M. (Ed.). (2018, August 13). Joint Task Force ARES and Operation GLOWING SYMPHONY: Cyber Command's Internet war against ISIL. Retrieved from <https://nsarchive.gwu.edu/briefing-book/cyber-vault/2018-08-13/joint-task-force-ares-operation-glowing-symphony-cyber-commands-internet-war-against-isil>
- Online preachers of hate: Anwar al-Awlaki, "bin Laden of the internet." (2011, June 7). *Telegraph*. Retrieved from <https://www.telegraph.co.uk/news/uknews/terrorism-in-the-uk/8560438/Online-preachers-of-hate-Anwar-al-Awlaki-bin-Laden-of-the-internet.html>

- Pawlak, P. (2015). Cybersecurity: Jihadism and the Internet. *At a Glance*. Retrieved from [http://www.europarl.europa.eu/thinktank/en/document.html?reference=EP_RS_ATA\(2015\)557006](http://www.europarl.europa.eu/thinktank/en/document.html?reference=EP_RS_ATA(2015)557006)
- Rogers, K. (2015, November 25). Anonymous hackers fight ISIS but reactions are mixed. *New York Times*. Retrieved from <https://www.nytimes.com/2015/11/26/world/europe/anonymous-hackers-fight-isis-but-reactions-are-mixed.html>
- Rosenblatt, N. (2019). All Jihad is local. Retrieved from <https://www.newamerica.org/international-security/policy-papers/all-jihad-is-local/>
- Roy, E. A. (2019, April 24). “No right to livestream murder”: Ardern leads push against online terror content. *Guardian*. Retrieved from <https://www.theguardian.com/world/2019/apr/24/christchurch-call-ardern-leads-push-against-online-terror-content>
- Schmitt, E., & Sengupta, S. (2015, September 26). Thousands enter Syria to join ISIS despite global efforts. *New York Times*. Retrieved from <https://www.nytimes.com/2015/09/27/world/middleeast/thousands-enter-syria-to-join-isis-despite-global-efforts.html>
- Scimeca, D. (2015, December 11). ISIS is using military simulator Arma 3 as a recruitment tool. Retrieved from <https://www.dailydot.com/layer8/isis-using-arma3-recruiting-tool/>
- Stern, J., & Berger, J. M. (2016). *Isis: the state of terror*. London, England: William Collins.
- Tarabay, J., Shiloach, G., Weiss, A., & Gilat, M. (2015, October 8). To its citizens, ISIS shows a softer side too. Retrieved from <https://www.vocativ.com/world/isis-2/to-its-citizens-isis-also-shows-a-softer-side/>
- Tolido, R., Van Der Linden, G., Thieullent, A.-L., & Frank, A. (2019, November). *Reinventing cybersecurity with artificial intelligence: The new frontier in digital security*. Capgemini Research Institute.
- Unanimously adopting Resolution 2199 (2015, February 12), security council condemns trade with Al-Qaida associated groups, threatens further

targeted sanctions. (2015). Retrieved from
<https://www.un.org/press/en/2015/sc11775.doc.htm>

Wallace, M., & Townsend, F. F. (2017, November 30). The case for removing extremist videos from the internet. *New York Times*. Retrieved from <https://www.nytimes.com/2017/11/30/opinion/youtube-extremist-videos-internet.html>

Zelin, A. Y. (2019, November 8). A clearinghouse for jihādī primary source material, original analysis, and translation service. Retrieved from <https://jihadology.net/>

THE BUTLER-TARKINGTON COMMUNITY MEMBER VIEWS ON THE PERCEIVED GENTRIFICATION

JULIO C. TRUJILLO JR., ETHAN DANIELS, BUTLER UNIVERSITY
MENTOR: KENNETH COLBURN, JR.

Abstract

Butler-Tarkington, a neighborhood within Indianapolis, has undergone some recent renovations, especially a noticeable change of the Butler-Tarkington community park. Such investments are often seen as much-needed changes to the community, but some people worry that this modification signals the initial threat of gentrification. Gentrification is a widespread phenomenon occurring throughout cities across the country. Two schools of thought have arisen about gentrification: that it is a beneficial process that redevelops low-income communities, and that it displaces old residents and creates a class and racial conflict. This study examines this process through the ground level by utilizing in-depth interviews as a means of clarifying this often-complex phenomenon. Through interview data gathered from longtime residents, newcomers, and stakeholders, we discovered attitudes toward this perceived gentrification of the Butler-Tarkington neighborhood. We believe our study offers an often-unheard voice in the scientific literature regarding gentrification.

Introduction

In the fast-paced globalizing world, urban communities struggle, almost universally, with the issue of segregated income, race, and ethnicity as a result of communities grappling with methods to manage racial, ethnic, and cultural diversity (Grier & Perry, 2018). Consequently, at times, the process of gentrification is introduced in which a community changes its demographic landscape and economic values (Williams & Needham, 2016). Many highlight these community changes that gentrification sparks; for example, the composition and neighborhood character are shifted—negatively or positively—once a gentry class returns (Kellogg, 2015). The social changes occurring within the gentrifying communities indeed spark debate among residents (both long- and short-term), policymakers, stakeholders, scholars, and concerned citizens.

According to research done on the 50 largest cities in the U.S., approximately 20% of lower-income neighborhoods have experienced gentrification since 2000, compared to 9% between 1990 and 2000 (Maciag, 2015). The need for scholarship on the interpretive accounts of all peoples involved in the process of gentrification is great; therefore, in this paper, we will find the two primary focal debates of gentrification. The first school of thought argues that gentrification is beneficial to struggling communities, while the second school of thought argues that gentrification shifts the urban layout that was once common to the original residents and sparks class and racial conflict. We conducted an exploratory study on the attitudes of residents and stakeholders according to their perceptions of gentrification in an Indianapolis, Indiana, neighborhood in order to explore the merits of each of these two different perspectives on gentrification. A lack of studies exist utilizing the voices of community members, and this is why we performed a project that is quite parallel to participatory action research; we decided it was best to have an exhaustive account from all members involved in the local community, thus further expanding the study of gentrification from a unique lens. To examine the phenomenon, we utilized a qualitative (open-ended) interview approach and a snowball sampling method, in which a community center in the local community assisted us in finding an array of interested participants.

Review of the Literature

Since the term “gentrification” first appeared, its meaning and significance have been ever-changing within the literature of the social sciences (Sheppard, 2012). Coined in 1964, the term was introduced to academia during London’s gentrification phase of the 1950s and 1960s (Glass, 1964). Social research has documented even earlier instances of gentrification dating back to the 1940s in Brooklyn, in which the historical “brownstoning” took place (Osman, 2011); however, the way the social sciences study gentrification is influenced now by the foundations set by Glass’s effort. With the realization that gentrification is such a complex social issue, scholars have utilized a wide range of methodological approaches to understand the phenomenon since the term’s original use (Zuk, Bierbaum, Chapple, Gorska, & Loukaitou-Sideris, 2018).

The salience behind gentrification is politically loaded (Davidson & Lees, 2005). By its very nature, gentrification evokes strong stances from different political parties within the affected community, and from bystanders external to the phenomenon. To many, the process of gentrification is a savior of crumbling communities, and to many others, it is riddled with class conflict and the

displacement of culture (Smith, 2005). In academia, gentrification is therefore seen as a dichotomy rather than a subject of complexity (Atkinson, 2002). This dichotomy is reflected in the two main schools of thought regarding gentrification: gentrification as a tool to uplift communities and gentrification as a catalyst of class and cultural conflict.

Without question, gentrification has parties that propose the process of gentrifying, and those who disapprove the movement. Many who support gentrification see it as a tool that reinvigorates the economic and social standing of areas that would often be left neglected otherwise (Meltzer & Ghorbani, 2017). Those against gentrification see it as a force that displaces residents, usually of ethnic minorities, and profoundly changes the cultural character of the community to adhere to the tastes of the gentry class (Langegger, 2016).

On balance, some scholars argue that gentrification is not harmful to the gentrified zone but is beneficial for both parties involved (Byrne, 2003; Meltzer & Schuetz, 2012). The increase of well-educated and affluent residents, according to research, is excellent for communities. For example, Byrne (2003) argues that residents who can pay taxes, purchase the goods and services, and support the political structure of the city, state, and federal processes can in return help both the gentrifiers and those in displacement. Consequently, cities that can attract more affluent members can aggressively push for affordable housing.

Some scholars argue that gentrification is not harmful and in fact has the possibility of providing job opportunities for the community. One study found that while regional job decline was found in the gentrified area in the form of low- and moderate-wage positions, local residents saw gains in higher-wage jobs in proximate areas, with lower-wage jobs being established slightly farther away (Meltzer & Ghorbani, 2017). While the local job losses initially appeared to be negative, the introduction of more goods-producing jobs and higher-wage jobs within only a mile of the gentrified neighborhood offered optimism in the gentrifiers' ability to bring in better-paying work. The gain in new employment more than compensated for the localized losses that occurred during the gentrification process (Meltzer & Ghorbani, 2017). Not only are jobs introduced, but gentrifiers can attract new services that had not existed before the gentrification process (Meltzer & Capperis, 2014; Meltzer & Schuetz, 2012).

In another argument regarding gentrification, literature has underlined enclaves attracting urban innovation (Zukin & Kosta, 2004), as in, far from the detriment of communities through commercial gentrification, the introduction of

high-end businesses may create a neighborhood of innovation in the city's economy, producing an attractive and social neighborhood interchange. Additionally, the gentrified community may bring increase in the public-service sector, such as sanitation and the introduction of public libraries (Byrne, 2003).

Furthermore, the relationship between crime and gentrification lacks consensus in academia. Some scholars find a positive association with crime and gentrification (Bogges, Lyndsay, & Hipp, 2016), while others see a negative association (Barton, 2016; MacDonald, 1985). Thirdly, other scholars find both positive and negative associations (Papachristos, Smith, Scherer, & Fugiero, 2011). Moreover, according to MacDonald (1986), gentrification can account for the reduction of crime, especially violent crime. Some may argue, however, that gentrification may cause an increase in property crime within the gentrified community, at least in the short run, because of the tempting newcomers in the community. Further, the process of gentrification, through the ends of the gentry class, can be of more success in obtaining secure policing from the city, and the gentry class will pay the taxes to increase the possibility (MacDonald, 1986).

Interestingly, we found studies that discovered higher crime in gentrifying areas; more interesting is their finding that fewer people were pulled over by police in gentrified areas but more were stopped in neighborhoods near the gentrified communities (Laniyonu, 2018). This finding may suggest that both an increase and a decrease in crime can occur, but in different places around and in the gentrified zone.

Moreover, research reveals neighborhood change on educational attainments during the process of gentrification. Schools that reflect diverse socioeconomic backgrounds and education levels among parents have been shown to have a positive impact on students, contrary to the effect in schools in which all the families are poor (Heise & Ryan, 2002). Affluent parents fighting for higher standards of education, or affluent students understanding that if they work hard in school, they will receive benefits in the future are both reasons for an increase in education quality (Byrne, 2003).

Despite the scholarship that gives a round of applause to gentrification as a process of community safety, neighborhood revitalization, and the integration of communities (Byrne, 2003; MacDonald, 1986; Meltzer & Schuetz, 2012), many scholars are critical of the process of gentrification because of the termination of culture, the detrimental effects on the communities' original residents, and the

physical and physiological displacement of the once-community (Danley & Weaver, 2018; Kellogg, 2015).

When the original residents communicate their fear of gentrification, they do not always revolve the dialogue around displacement through housing (Danley & Weaver, 2018). Instead, literature has found that residents also worry about the new developments being exclusionary toward them, a feeling of unwelcome known as the white space (Anderson, 2015). The creation of white space is a representation of a white invasion in a given community: the space is informally “off limits” to the original ethnic-minority residents (Anderson, 2015). Of argument, however, research has contested that the gentry class promotes a good “neighbor ethos” (Tissot, 2014): The gentrifiers not only claim their openness but also try to use their values to implement diversity among newcomers and different groups. Gentrifiers’ commitment to diversity is itself linked to their ability to control that diversity, however (Tissot, 2014).

The symbolic language of arriving businesses can spark cultural tension. Other research has discussed, similar to Anderson’s (2015) “white space” concept, the racial tension among spaces in gentrified neighborhoods. That is, the new retail sector offers goods and services to supply the gentry class, changes the prices according to the income of the newcomer class, and creates Anderson’s “white space” that attracts the arriving class yet alienates longtime residents (Patch 2008; Zukin 2008; Zukin et al., 2009). Moreover, scant studies take an interpretive account by interviewing community residents (Monroe Sullivan & Shaw, 2011). Of the available literature, they confirm that long-term residents feel that the new services and products lack representation of the once-community and make the residents uncomfortable, and residents are resentful about the original businesses being displaced by newly arriving ones (Deener, 2007; Freeman, 2006; Maurrasse & Bliss, 2006). Monroe Sullivan and Shaw (2011) empirically support this, but they uncovered the racial tension among involved parties in the gentrified neighborhood. Of their study, many people of color not only viewed the process of gentrification negatively but also used explicit racial language when describing the new retail stores in their community as dissatisfying for their community needs.

The transition of public space to privatized space is another issue that arises within gentrification. Neoliberal urbanism occurs when stratified economic and cultural resources produce inequality or unevenly developed public amenities, which can range from elite privatized public parks in wealthy neighborhoods to downtrodden parks in poor neighborhoods (Loughran, 2014). The creation of entrepreneurial parks has become common throughout contemporary cities across

America. The idea of commodification can be introduced as well in regard to the use of diverse authenticity as a means of expunging money from incoming gentrifiers. Cities are increasingly using entertainment as a driver for gentrification, which ultimately commodifies the neighborhood character (Langegger, 2016).

Elite actors in gentrified areas spur economic growth in public spaces that promote leisure and in consumption that represents their tastes. Spatial privilege is derived from neoliberal urbanism and helps us understand the phenomenon of gentrification. Spatial privilege is the hegemonic ability to make claims on public space; this privilege is derived from having a high-standing position in the socially constructed hierarchies of gender, race, class, and national origin. These social advantages are reproduced in a process that affirms existing cultural capital for individuals; it also enables the practice of consumption that encourages communities to adapt even more types of areas that incorporate consumption as a main function of their existence (Loughran, 2014). This brings in the idea that public spaces must be financially self-sustaining rather than sustained by the state and by taxpayer money; parks can therefore be exclusionary in their policies, through either direct discrimination or, in most cases, indirect discrimination. For example, renovated parks may include more workers that make sure recycling bins are empty at all times to remove the presence of lower-class bottle collectors scrounging through the bins and showing a form of social disorder that is unattractive to the gentry (Loughran, 2014).

According to the theoretical basis of symbolic interactionism, cities and places can have identities that are fluid and dynamic, just as an individual or collective group can. Essentially, places are social in nature in the sense that they change over time because of external factors. Changes in demographics of the surrounding area and the movement of industry can drastically change the cultural context and collective memory of a certain area (Borer, 2010). Thus, to understand that certain areas change their collective memories because of demographic changes over time can further our knowledge on gentrification. As everyday interactions of certain public places change, symbolic boundaries of neighborhoods are redrawn, dictating which group has claim to the neighborhood, thus changing the future of that place. This urban culturalist approach can provide an insight into the demand side of gentrification.

The search for authenticity can be a driving factor for the influx of capital and the displacement of the older population by the gentry; collective memory is the dominant force driving this conflict (Brown-Saracino, 2013). The cultural norms of the gentry can be supported by the local institutions as the right way of

doing things, thus cleansing the old neighborhood of individuals associated with the old decay (Brown-Saracino, 2013). Research has shown that an ideology of diversity is persistent with gentrifiers. Affluent gentrifiers boast about their diverse neighborhoods, hence describing themselves as tolerant and progressive individuals; it is argued, however, that this maintains a system of inequality because the guise of diversity simply represents the interests of the gentry.

Essentially, gentrification occurs within the cultural framework based on the idea that a fragmentation in the collective memory is the catalyst for gentrification. The combination of the historicizing of a former working-class neighborhood, in addition to the delocalized celebration of diversity, leads to an ability of gentrification to take hold of this cultural taste. Once an area is gentrified, the meaning and cultural context of that area can be shaped to the tastes of the gentry, completely changing the environment. Areas that previously represented the old population culturally can be shifted to represent the cultural values of the gentry, thus making old residents feel alien in their own communities. This issue was termed “cosmopolitanism” by another research project and is what happens when gentrifiers create “authentic” restorations of the community that they believe represent the former demographic. Often, the original population sees these renovations as out of touch and not an accurate representation of their community (Langegger, 2016).

Gentrification changes the urban ecology of communities. At times, the process of gentrification is slow and unseen, sometimes not noticed at all (Williams & Needham, 2016). Moreover, gentrification is often seen in academia as harmful or beneficial in its outcome. The focus of this study is not on the consequences but rather on the perceptions of community residents living within the gentrifying community. This approach is an attempt to illuminate a voice that may not be heard otherwise. Neutral in stance, we sought to hear the meaningful accounts of Butler-Tarkington community members through an exploratory study.

Our research shined a light in the gaps of the present literature. That is, few studies include interpretive accounts gained from interviewing residents of the gentrified communities under examination (Danley & Weaver, 2018; Monroe Sullivan & Shaw, 2011). Further, many researchers have called attention to the displacement of residents caused by gentrification. Fewer, however, have examined how displacement affects the residents—particularly lower-income residents—at the ground level (Betancur, 2011). Additionally, little research has been completed on the perspective of the gentry class and the ways gentrifiers think of the new places they are moving into (Donnelly, 2018). In hopes of filling in the gaps, we

explored opinions about the gentrification process through hearing the accounts of all residents and playing actors. Importantly, we emphasize not only displacement when residents discuss gentrification; unwelcomeness and exclusion are also key focal points, both of which are often associated with the initial stage of gentrification (Danley & Weaver, 2018).

Butler-Tarkington

The Butler-Tarkington community is predominantly residential neighborhoods located on the near northwest side of Indianapolis, Indiana (Wheeler, 1999). The triangularity of the community is created by 38th Street to the south, Meridian Street to the east; and Michigan Road and Central Canal to the west (Figure 1). The name of Butler-Tarkington originates from Hoosier (Pulitzer prize-winning) author Booth Tarkington, who lived on Meridian Street from 1923 to 1946, and from the Butler University campus, which has been in the middle of the Butler-Tarkington community since 1920. Butler-Tarkington covers approximately 930 acres of Indianapolis (Polis Center, 2020; Wheeler, 1999).



Figure 1. The Butler-Tarkington neighborhood.

Source: "Butler-Tarkington Homes, History, Facts & Photos," by Amasters, 2015, M. S. Woods Real Estate, <https://www.mswoods.com/blog/butler-tarkington-homes-history-facts-photos/>.

By the turn of the 19th century, the farms that had once been operated by a German diaspora in the Butler-Tarkington area shifted to “suburban houses.” The development of the original homes is described as “small and narrow,” and these houses were built close to the streetcar line operated during the earlier decades of Indianapolis, an establishment known as a streetcar suburb (Wheeler, 1999). Simultaneously, the electric railways spawned North Meridian Street, an area well-known as a historic district in Indianapolis. Emerging as the location of choice for the Indianapolis elite, the locality is regarded as one of the most exclusive residential neighborhoods in the city of Indianapolis (Wheeler, 1999). Furthermore, in 1928, Butler University purchased a 300-acre Fairview campus; the establishment of the college campus catalyzed the second wave of middle-class residents. By the 1940s, the Butler-Tarkington community had a population of 12,244 people: 96.3% Caucasians and 3.6% African Americans (Polis Center, 2020). The community—a middle-class residential area—was thus considered a developed location in the city.

From the 1920s to the 1950s, Butler-Tarkington was a predominantly white middle-class community (Wheeler, 1999). During the 1950s, the community’s population began to shift. Because of the Civil Rights Movement, primarily white neighborhoods such as the Butler-Tarkington community started to open to people of color. As mentioned in by Wheeler (1999), the population south of 38th Street began to move northward. In response, the long-term community members of Butler-Tarkington started to move out toward the west and further north, a move known as white flight. Wheeler’s (1999) study describes the phenomenon as “realtors attempt[ing] to profit from the ignorance and fear of white residents, relying on peer pressure and encouraging whites to move so they could sell new property to them and their property to blacks” (p. 16). Thus, the population of the community gradually shifted. By the 1970s, the Caucasian population had decreased by 30% and the African American community had increased by 30%. According to Zip Data Maps, the neighborhood now comprises 68.5% white Americans and 28.99% African Americans.

Methods

The focus of this study was to reveal if gentrification is happening in the Butler-Tarkington neighborhood. To do this, we prioritized the voices and accounts of residents and stakeholders involved in the community. Urban renovations and reforms often coincide with worry and fear of gentrification, often leaving residents feeling powerless and as though they have no say in their community (Danley &

Weaver, 2018). In contrast, renovations can be seen as a revival of a disabled community, which brings optimism to residents (Byrne, 2003). Thus, our research focused on illuminating community voices and their perceptions. Our method of research was derived from Danley and Weaver (2018) and consisted of observation in addition to interviewing local residents and stakeholders. Importantly, we separated participants into two groups of two each: (1) longtime community members and newcomers and (2) residents and stakeholders. We defined community members to incorporate these groups. These classifications allowed us to determine whether contrasts exist due to differences in time spent in the community, as well as whether stakeholders’ viewpoints differ from residents’ viewpoints.

Our study is qualitative, and thus inductive in nature. We interviewed 16 participants, ages 18–74 (Figure 2), who were involved in the Butler-Tarkington neighborhood as either residents or stakeholders. These participants were further sorted into strata of nine newcomers and seven old members; three stakeholders; and four renters and nine homeowners. Longtime members are defined as having lived for 10 years or more in the community, while newcomers are defined as having been engaged in the Butler-Tarkington area for fewer than 10 years. Stakeholders are defined as individuals who do not live within the community but have an impact or investment—for example, as a teacher or a community leader/activist. Of the interviewed, eight are black, seven are white, and one identified as Latino (Figure 3). In regard to gender, eight are male, and the other eight are female. Thirteen (13) participants described themselves as homeowners or residents who lived within the community, while three considered themselves stakeholders (Figure 4). Of the participants, nine were considered newcomers and seven were considered old members.

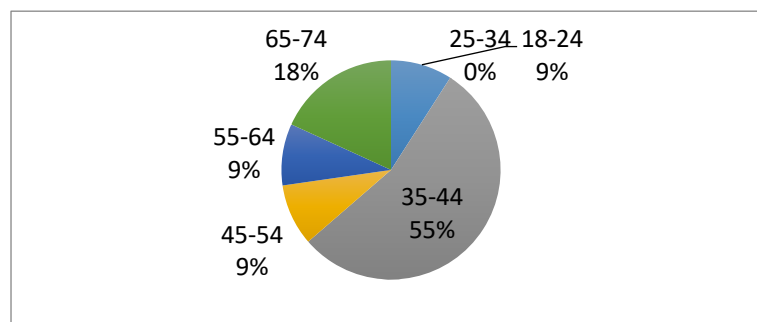


Figure 2. Age of study participants.

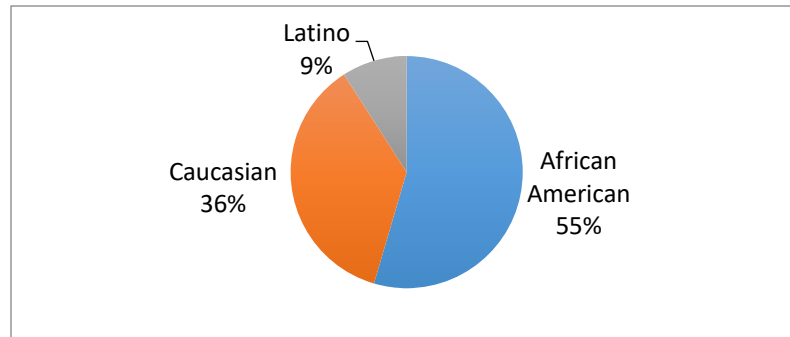


Figure 3. Race and ethnicity of study participants

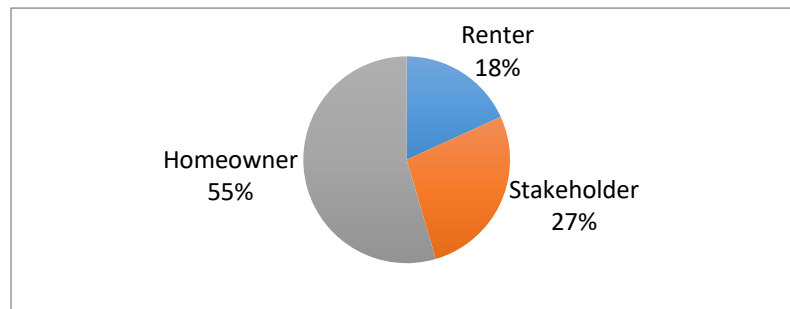


Figure 4. Types of community members in the study.

To find participants, we utilized a convenience-snowball sampling method. This sampling method attempts to gain varied perspectives in response to changes within the community; our questions and discussions capture different elements that intersect with gentrification. These elements consist of perceptions of crime, observed changes in one's community, and overall satisfaction in the community. In conjunction, questions regarding the newly renovated Butler-Tarkington park were asked to derive a starting point for discussion, especially regarding the topic of gentrification.

Structurally speaking, our interviews were open in nature, and semistructured. The questions we used are modeled from the interview guide of our mentor, Dr. Kenneth Colburn, a Butler University liberal arts professor, and can be found in Appendix A. Our data collection was based upon recurring themes in the interviews that arose. The themes were defined by similar elements that occurred often in the interviews; this was done through a coding process on an application

called Nvivo12. We arranged quotes directly from the interviews into themes, then organized subcategories within the themes. For example, one of our themes is two neighborhoods in one, and within this theme, one can find subcategories such as segregation, food deserts, and home values. This process allowed for themes to emerge through the recurrence of certain phrases and words while further enriching the themes by creating subcategories for each theme; ultimately, we ended up with three themes: neighborhood change, the good and the bad of the park, and two neighborhoods in one.

The Institutional Review Board reviewed our research methods and approved our methodology. Before proceeding with the interview, every participant in the study was informed that his or her responses would be completely confidential and anonymous, and this was finalized by participants signing an anonymity agreement preceding the interviews.

Findings

The results reveal that being a community member in the Butler-Tarkington neighborhood is not a simple conceptualization. Many community members argued against the change in their neighborhood; simultaneously, quite a few appreciated the transformation. We observed that sections of the Butler-Tarkington neighborhood are evidently different in terms of socioeconomic and racial diversity. Indeed, literature has mentioned the latter (Brabant & Braid, 2009; Wheeler, 1999). The analysis revealed three subordinate themes related to (1) neighborhood change, (2) the good and the bad of the park renovations, and (3) the division in Butler-Tarkington (Table 1).

Superordinate themes	Subthemes
1. Neighborhood Change	<p>“I am scared that these new housing development initiatives could destroy the uniqueness.”</p> <p>“I am glad the homes are being renovated. ... I just want the racial diversity to be maintained.”</p>
2. The Good and the Bad of the Park Renovations	<p>“I’m at odds. ... There was not enough inclusion in the process.”</p> <p>“The Tarkington Park is an excellent way to bring the neighborhood together.”</p> <p>“It is a beautiful sight to see the diversity and all the kids play together.”</p> <p>“I think they’re excessive (renovations), a little bit like an embarrassment of riches.”</p>
3. Two Neighborhoods in One	<p>“It’s not a Butler-Tarkington; there’s a Butler community, and there is a Tarkington community.”</p> <p>“Racial division ... as mixed as the neighborhood is, there is no close-knit connection.”</p> <p>“Your property is valued more if you are north of 42nd Street whereas less south of 42nd Street.”</p>

Table 1. Themes Revealed in the Study

Neighborhood Change

An overwhelming majority of community members noted a change in the neighborhood. As explained in the literature, termination of the previous culture, detrimental effects on the original residents, and physical and physiological displacement in the neighborhood all occur (Danley & Weaver, 2018; Kellogg, 2015). Often, the original population also argues that these renovations are not an accurate representation of their community (Langegger, 2016). Furthermore,

through our analysis, we have come across statements from community members that reflect the concerns mentioned in the literature review. For example:

I do not know ... it concerns me that there is less people of color in the neighborhood ... that bothers me. People [are] buying housing that were once owned by people of color, people [white Americans] are taking over the neighborhood. ... I have this reoccurring dream that white people are in our front yard ... so I guess this is a concern for me.

Change in the neighborhood is not solely physical; rather, it also has a psychological impact on residents, which was made evident by a resident of more than 25 years in her statement (above) about a reoccurring dream of white people standing in her front yard. The demographic change in the neighborhood coincides with her fear of alienation and the possibility of her displacement. Her fear is not unwarranted, as other respondents have observed these demographic changes as well. A former resident who was born and raised in the Butler-Tarkington neighborhood mentioned, "I remember it being much more urban, more blacker."

The abovementioned issue illuminates the possibility of a "white space," which consists of a white invasion in a given community; the space is informally "off limits" for the original ethnic-minority residents in certain areas (Anderson, 2015). A stakeholder and resident of more than 30 years mentioned residents "looking out for their history of what is going on ... need to remember where we come." The resident made it known that his history and culture in the Butler-Tarkington community should not be altered because of gentrification. Consequently, the change, according to many interviewed, is the presence of "young Caucasian couples with families."

Our study found that the neighborhood character was an important attribute for some residents of the Butler-Tarkington community. Langedger (2016) made a similar discovery through his study: that the change of neighborhood character was not an authentic representation of the studied community. The majority of respondents within our study did not oppose the renovations, however; most respondents were neutral about the renovations, and a few supported the housing renovations. We nevertheless find it essential to mention, since the possibility of more housing renovations may spark more opposition. Housing renovations were a concern for a small minority of the interviewees, as illustrated

by a long-term resident expressing her admiration for the unique style of housing in her neighborhood:

I love the uniqueness of every house. ... I am scared that these new housing development initiatives could destroy the uniqueness. ... I have seen the destruction of old homes being replaced by new ... replaced with homes twice the size and cost ... the raising of taxes that comes with this forces people [to] sell ... the housing is switching to young couples with families.

Because respondents were given the agency to define gentrification, the definition of the term varied according to the community member. The most prominent reasons for gentrification in Butler-Tarkington are based on race and housing renovations; thus, certain respondents concentrated on race and not housing renovations, and vice versa. In result, all but three respondents mentioned that gentrification is happening (10) and somewhat happening (3).

The Good and the Bad of the Park Renovations

Adjacent to the Martin Luther King Multi-Community Center and 38th Street lies the newly six-million-dollar-renovated Butler-Tarkington neighborhood park. As observers, we recognized the beauty of the park amenities, which community members did as well. After simply being asked what they thought about the park renovations, many participants (13/16) immediately commented on the beauty of the park. Moreover, half of the respondents noted that park renovations offer more community growth. Many participants explained this community growth as an aspect of propelling diversity through a public space serving as a foundation for community interactions. In addition to the diversity aspects, many participants stressed the importance of the park and economic growth. The park is seen as a beacon of redevelopment and serves as a magnet for businesses to open up shop, according to some community members. We observed, however, that a brewery was open for only a brief time, illuminating the issue that certain economic tastes initiated by the park are not yet supported by the community.

Some respondents offered the following:

Things like the Tarkington Park are an excellent way to bring the neighborhood together. ... My kids play with kids they probably wouldn't get a chance to play with any other time, and vice versa.

I have state senators and city counselors tell me that black kids won't play on that equipment and they have since come and told me that they were wrong. ... It is a beautiful sight to see the diversity and all the kids play together ... to me, the whole park being built for white kids was highly offensive.

I see the park surely bringing in growth on Illinois Street ... more businesses. ... The park serves as a catalyst for this stuff.

Many respondents acknowledged the beauty of the park and what it is—as well as what it could possibly bring—yet some participant members of Butler-Tarkington (6/16) still mentioned controversial opinions about the park. The noticeable price tag attached to the renovations on the park is evident through observation, and through the paperwork; one source lists the park renovations as costing \$6 million. Because the park is located in a community where many of our respondents mentioned a food desert and the injustices challenging the residents in the area, some respondents questioned if the initiative could have been best used somewhere else, not focused solely on the neighborhood park, as other locations “need more attention.” A community member of more than 50 years mentioned, “My biggest concern is around the corner ... on Illinois Street, 7-Eleven used to be there (next to the park) ... still need to improve that area, that area needs attention ... renovate what is there.” Another participant observed, “Best use of resources, that can be questionable. ... I heard some numbers, multi-millions. ... I don't know, I guess people are trying.”

Community members also highlighted the process of the park's renovation being top-to-bottom; there was no inclusion, some argue. Prior to the park renovations, some passionately mentioned, predominantly African Americans used the park amenities but they were not included in the process of developing the park:

Yeah, because we knew everybody. ... It is the coolest place [the park]. ... You never seen the whole hood this tight. ... We be at the park now, and

they act that like we be terrorizing the park ... and we didn't have a say in the park's upgrades. ... They changed it [the park] to make us go away; they only built that for the white people and Butler [University].

Yes ... I think they're pretty and would be good for the front of a magazine [park renovations], but I think they're excessive a little bit, like an embarrassment of riches ... process of it was very outside-in ... people are supposed to just appreciate it.

I'm at odds. ... A lot of the improvements pushed our football practices to where we are now. ... There was not enough inclusion in the process. ... As far of the look, it looks good. ... A lot of people who were not using the park were the ones making the decisions. ... We don't have a grocery store, we used to have a 7-Eleven, so mostly a food desert over here and a nice park.

Two Neighborhoods in One

Twenty years prior to our current research, an ethnographic study was done on the Butler-Tarkington neighborhood. Interestingly enough, the voices of the past echo to this day; the study reveals no change between the northern and southern halves of the Butler-Tarkington neighborhood. Cultural and financial differences between the northern part and the southern part have been long-standing. Wheeler (1999) observed, "It seemed to me that the African-American population was concentrated in the southern end of the neighborhood, with the northern end being primarily inhabited by white residents" (p. i).

We argue that the contemporary division in Butler-Tarkington still contains remnants of the past. As a key stakeholder of the community mentions, there is a "racial divide in the neighborhood ... unofficially a north Butler-Tarkington and a south Butler-Tarkington." Additionally, a long-term community member who has called Butler-Tarkington home for more than 30 years stated, "Racial division ... I think a lot of blacks don't interact with the whites, and a lot of the whites don't interact with the blacks ... as mixed as the neighborhood is, there's no close-knit connection ... it's not blended."

Residents who expressed concern regarding the racial divide in the community said this aspect of Butler-Tarkington was synonymous with segregation (4/16). As we conducted the interviews, we simultaneously spent numerous hours engaged in the Butler-Tarkington community. Observing the division firsthand, we could not help but notice the stark contrast in market value of the properties when only walking a few blocks. Some interviewees (5/16) noted the stark contrast in property values between the two halves of Butler-Tarkington. One longtime resident mentioned “lines of demarcation ... and that kind of thing ... where your property is valued more if you are north of 42nd Street whereas [valued] less south of 42nd Street.” Indeed, the housing stock shows a stark contrast between the “northern part with homes valued up to 2,000,000 dollars and homes in the south which can value as low as 30,000,” as a former community member mentioned.

Moving toward the southern part of Butler-Tarkington, many community members commonly stress the issue of inadequate food services and commercial options. A stakeholder involved with the community made it evident through our interview that he has a lack of food options during his work lunch break: “Lack of access ... I don’t eat McDonald’s or Burger king. ... I have a 20-minute window for lunch. ... I drive to [Broad] Ripple ... more healthy access to foods.” A separate stakeholder explained the situation in Butler-Tarkington in this way: “There’s no grocery store ... it’s a food desert.” A longtime community member’s statement further fortifies the idea of this food desert: “We don’t have a grocery store; we used to have a 7-Eleven, so mostly a food desert over here.” With these current findings, we note the struggles of certain residents to obtain adequate food.

Discussion

This qualitative study has sought to gain a clearer idea of the relationship between community attitudes and gentrification. Disclosure of the attitudes of many of the black participants of this study has clearly shown more of a racial perspective of the process of gentrification. These participants emphasized the division between the north and south of Butler-Tarkington similar to racial segregation of the past. Consequently, when the park renovations occurred toward the south side of the community, residents questioned why there was a lack of inclusivity. While these interviewees admired the new renovations, many who lived in the southern part of the community emphasized the need for adequate businesses.

Symbolic interactionism is a theoretical framework that applies to our research. Residents spoke about the issue of the changing demographics of the park. This relates back to the idea that physical locations can have shared social meaning

and character and that this social meaning can be changed by external factors. Residents who visited the park before renovations noticed a change in the racial demographics from predominantly black to more diverse. Respondents who raised this issue were not opposed to the changing demographics of the park; they just noted that this diversification was catalyzed by the renovation. Changing these demographics can lead to a change in the cultural context and collective memory of a location. In this case, the park was initially a predominately homogeneous cultural space for black visitors but has since diversified (Borer, 2010).

The conflictive nature with this change of cultural space arises with symbolic boundaries being redrawn to fit the needs of the gentry, that the change in the collective memory in a location can drive out the older residents of the community (Brown-Saracino, 2013). Based upon our interviews, residents did not feel as if the renovation and change in the culture were threats to them staying in the neighborhood. Furthermore, our study does not have the merit to generalize this park as a “white space,” as exclusion was not felt, according to the respondents.

While these interviewees stated that gentrification was occurring, only three respondents argued gentrification happening. These respondents focused on the fact that displacement was not occurring because of their view of a strong diverse community. The white respondents who agreed that gentrification was occurring focused more on aspects involved with housing renovations and home pricings, contrary to a racial perspective, which was predominant in the African American respondents. This was the only noticeable difference between black and white respondents. The length of involvement in the community and the type of community member did not have noticeable differences in viewpoints; however, the only participants to say gentrification was not happening were new members. Also, all four stakeholders mentioned that gentrification was happening and offered exhaustive responses.

Methodological Limitations

The biggest limitation of our study was the small sample size of 16, which means that the results cannot be generalized to all people of the Butler-Tarkington community. Additionally, a vast amount of the participants were contacted through the Butler-Tarkington Neighborhood Association; the possibility of a skewed result is evident, since these participants wanted their voices heard; others did so, too, but were not involved in the neighborhood association. To contact the latter, we randomly selected people from the neighborhood park, yet many did not have the time for meetings or never replied to requests for scheduled meetings.

Implications

The second-to-last question in our interview guide concentrated on how to deal with community change. A significant number of respondents mentioned the need for community members to participate in the Butler-Tarkington Neighborhood Association. Ultimately, this boils down to an aspect of inclusivity in decision-making, which was mentioned in some way by all participants. Essentially, having a seat at the table is desirable for residents. Through our analysis, this is the most profound implication that ought to be considered, as we wanted to hear and analyze what the residents were saying about what they want implemented.

Further Research

Studies to explore the relationship between Butler-Tarkington residential attitudes and gentrification, paying particular attention to the racial differences, are needed. It would also be helpful to explore the attitudes deriving from residents from the southern and northern ends of Butler-Tarkington. It would be beneficial to Indianapolis communities to better understand the depth of racial perspectives related to the community members and the ways to resolve the conflict among people who see gentrification as a negative, as unjust, and in some contexts a racist way of improving neighborhoods. It would also be helpful to understand the relationship between them and those who approve of gentrification in Butler-Tarkington, to see where their underlying premises are set. A longitudinal study could explore the relationship at an impressive account.

References

- Amasters. (2015, January 1). Butler-Tarkington homes, history, facts & photos. M. S. Woods Real Estate. Retrieved from <https://www.mswoods.com/blog/butler-tarkington-homes-history-facts-photos/>
- Anderson, E. (2015). The white space. *Sociology of Race and Ethnicity*, 1(1), 10–21.
- Atkinson, R. (2002). *Does gentrification help or harm urban neighbourhoods? An assessment of the evidence-base in the context of new urban agenda*. Glasgow: ESRC Centre for Neighbourhood Research.
- Barton, M. (2016). An exploration of the importance of the strategy used to identify gentrification. *Urban Studies*, 53(1), 92–111.
- Betancur, J. (2011). Gentrification and community fabric in Chicago. *Urban Studies*, 48(2), 383–406.
- Bogges, L. N., & Hipp, J. R. (2016). The spatial dimensions of gentrification and the consequences for neighborhood crime. *Justice Quarterly*, 33(4), 584–613.
- Borer, M. (2010). From collective memory to collective imagination: Time, place, and urban redevelopment. *Symbolic Interaction*, 33(1), 96–114.
- Brabant, M., & Braid, D. (2009). The devil is in the details: Defining civic engagement. *Journal of Higher Education Outreach and Engagement*, 13(2), 59–87.
- Brown-Saracino, J. (2013). Gentrification. In J. Manza (Ed.), *Oxford Bibliographies*.
- Byrne, J. P. (2003). Two cheers for gentrification. *Howard Law Journal*, 46, 405–432.
- Danley, S., & Weaver, R. (2018). “They’re not building it for us”: Displacement pressure, unwelcomeness, and protesting neighborhood investment. *Societies*, 8(3), 74.

- Davidson, M., & Lees, L. (2005). New-build “gentrification” and London's riverside renaissance. *Environment and Planning A*, 37(7), 1165–1190.
- Deener, A. (2007). Commerce as the structure and symbol of neighborhood life: Reshaping the meaning of community in Venice, California. *City & Community*, 6(4), 291–314.
- Donnelly, K. (2018). The gentrifier's dilemma: Narrative strategies and self-justifications of incoming residents in Bedford-Stuyvesant, Brooklyn. *City & Community*, 17(2), 374–393.
- Freeman, L. (2006). *There goes the 'hood: Views of gentrification from the ground up*. Philadelphia, PA: Temple University Press.
- Glass, Ruth. (1964). Aspects of change. In J. Brown-Saracino (Ed.), *The gentrification debates: A reader* (pp. 19–30). London: Routledge.
- Grier, S. A., & Perry, V. G. (2018). Dog parks and coffee shops: Faux diversity and consumption in gentrifying neighborhoods. *Journal of Public Policy & Marketing*, 37(1), 23–38. Retrieved from <https://doi.org/10.1509/jppm.16.230>
- Heise, M., & Ryan, J. E. (2002). The political economy of school choice. *Cornell Law Faculty Publications*. Paper 194. Retrieved from <https://scholarship.law.cornell.edu/facpub/194>
- Kellogg, C. (2015). There goes the neighborhood: Exposing the relationship between gentrification and incarceration. *Themis: Research Journal of Justice Studies and Forensic Science*, 3(1), 10, 178–204.
- Langegger, S. (2016). Right-of-way gentrification: Conflict, commodification and cosmopolitanism. *Urban Studies*, 53(9), 1803–1821.
- Laniyonu, A. (2018). *Coffee shops, beat cops, and the ballot box: A study of gentrification, urban policing, and political behavior* (Doctoral dissertation, University of California Los Angeles).
- Loughran, K. (2014). Parks for profit: The high line, growth machines, and the uneven development of urban spaces. *City and Community*, 13(1), 49–68.

- Maciag, M. (2015). Gentrification in America Report. Retrieved from <https://www.governing.com/gov-data/census/gentrification-in-cities-governing-report.html>
- Maurrasse, D. J., & Bliss, J. B. (2006). Comprehensive approaches to urban development: Gentrification, community, and business in Harlem, New York. *Northwestern Journal of Law & Social Policy*, 1(1), 127–147.
- McDonald, S. C. (1986). Does gentrification affect crime rates? *Crime and Justice*, 8, 163–201.
- Meltzer, R., & Capperis, S. (2014). Neighbourhood differences in retail turnover: Evidence from New York City. *Urban Studies*, 54(13), 3022–3057.
- Meltzer, R., & Ghorbani, P. (2017). Does gentrification increase employment opportunities in low-income neighborhoods? *Regional Science and Urban Economics*, 66, 52–73.
- Meltzer, R., & Schuetz, J. (2012). Bodegas or bagel shops? Neighborhood differences in retail and household services. *Economic Development Quarterly*, 26(1), 73–94. Retrieved from <https://doi.org/10.1177/0891242411430328>
- Monroe Sullivan, D., & Shaw, S. C. (2011). Retail gentrification and race: The case of Alberta Street in Portland, Oregon. *Urban Affairs Review*, 47(3), 413–432. Retrieved from <https://doi.org/10.1177/1078087410393472>
- Osman, S. (2011). *The invention of Brownstone Brooklyn: Gentrification and the search for authenticity in postwar New York*. Oxford University Press.
- Papachristos, A. V., Smith, C. M., Scherer, M. L., & Fugiero, M. A. (2011). More coffee, less crime? The relationship between gentrification and neighborhood crime rates in Chicago, 1991 to 2005. *City & Community*, 10(3), 215–240.
- Patch, J. (2008). “Ladies and gentrification”: New stores, residents, and relationships in neighborhood change. In R. Hutchison (Series Ed.), *Research in Urban Sociology: Vol 9. Gender in an urban world* (pp. 103–126). Bingley, UK: Emerald Group Publishing.

- Polis Center. (2002). Study neighbourhoods. Retrieved from <https://polis.iupui.edu/about/community-culture/project-on-religion-culture/study-neighborhoods/>
- Sheppard, S. (2012). *Why is gentrification a problem?* Williamstown, MA: Center for Creative Community Development.
- Smith, N. (2005). *The new urban frontier: Gentrification and the revanchist city*. London: Routledge.
- Tissot, S. (2014). Loving diversity/controlling diversity: Exploring the ambivalent mobilization of upper-middle-class gentrifiers, South End, Boston. *International Journal of Urban and Regional Research*, 38(4), 1181–1194.
- Wheeler, L. M. (1999). *Discerning the invisible in a group portrait of stability: An ethnography of the Butler-Tarkington neighborhood*. Undergraduate Honors Thesis Collection, Butler University). Retrieved from <https://digitalcommons.butler.edu/ugtheses/102>
- Williams, T. L., & Needham, C. R. (2016). Transformation of a city: Gentrification's influence on the small business owners of Harlem, New York. *SAGE Open*, 6(4). Retrieved from <https://doi.org/10.1177/2158244016673631>
- Zuk, M., Bierbaum, A. H., Chapple, K., Gorska, K., & Loukaitou-Sideris, A. (2018). Gentrification, displacement, and the role of public investment. *Journal of Planning Literature*, 33(1), 31–44.
- Zukin, S. (2008). Consuming authenticity: From outposts of difference to means of exclusion. *Cultural Studies*, 22(5), 724–748.
- Zukin, S., & Kosta, E. (2004). Bourdieu off-Broadway: Managing distinction on a shopping block in the East Village. *City & Community*, 3, 101–114. doi:10.1111/j.1535-6841.2004.00071.x
- Zukin, S., Trujillo, V., Frase, P., Jackson, D., Recuber, T., & Walker, A. (2009). New retail capital and neighborhood change: Boutiques and gentrification in New York City. *City & Community*, 8, 47–64. doi:10.1111/j.1540-6040.2009.01269.x

Appendix A. Interview Guide

Demographic Information

Pseudo Name:

Gender:

Age:

Race and Ethnicity:

Type of Community Member (i.e. Renter, stakeholder, homeowner):

Years living/or involved with Butler-Tarkington:

Family living in the area (yes or no)

Street of your residence:

Occupation:

Highest educational level:

Home and Neighborhood

1. How important was the neighborhood (Butler-Tarkington) to your decision to buy/or get involved in?

Very important _____

Somewhat Important _____

Not at all Important _____

Explain:

2. Now that you have lived/or been involved here awhile, have your initial impressions or views about the neighborhood changed?

Yes: ____ No: _____

Explain _____

3. How many residents in the neighborhood do you know on a first name basis?

(Describe Interactions)

4. Have you or your family ever had any concerns about your personal safety living/involved in Butler-Tarkington? Yes: ____ No: _____

Explain _____

5. Do neighbors and residents here tend to look out for each other? Yes: _____
No: _____

Examples?

6. Have you or your family ever used the Butler-Tarkington park? Yes: _____
No: _____

How do you feel about the new renovations done to the Butler-Tarkington park?

7. Has neighborhood crime ever been a concern to you?
Yes: _____ No: _____

Explain:

8. How would you rate your overall level of satisfaction living/involved in Butler-Tarkington neighborhood?

Very Satisfied _____

Somewhat Satisfied _____

Little or no Satisfaction _____

Explain:

9. What, if anything, do you like least about living in Butler-Tarkington?

Understanding the neighborhood perceptions

10. What comes to mind when you think of the Butler-Tarkington community?

The impacts of Gentrification

11. What changes have you seen in the Butler-Tarkington neighborhood?

12. What current changes have you seen in the Butler-Tarkington neighborhood?

13. Have you heard the term gentrification?

Yes: _____ No: _____

If yes, what do you make of the term gentrification?

If no, (give definition: pg. 18) what do you make of this definition?

14. Does gentrification apply to the Butler-Tarkington community?

15. What does “community roots” mean to you as a resident of the Butler-Tarkington community?

16. What is the best way to deal with community changes?

17. Finally, is there anything you would like to add or say that we may have left out, forgotten to ask or mention, that you think would help us understand this neighborhood?

Definition used for question #13

The fear of displacement, loss of community icons—such as parks, businesses, and/or homes—and do you see exclusions from certain spots in your neighborhood because of renovations?

*Definition influenced by Danley and Weaver (2018).

WOMEN'S EMPOWERMENT OR EXPLOITATION OF WOMEN? EXAMINING THE IMPLICATIONS OF ECONOMIC EMPOWERMENT PROGRAMMING

BILLIE WHITE, MIDDLEBURY COLLEGE

MENTOR: KARIMA BORNI

Abstract

This paper demonstrates how international development institutions often overlook the subjective lived experiences of the women they are trying to help. It examines the prevailing economic perspectives on the relationship between fertility rates and poverty, and explores how within a neoliberal economic system, nongovernmental organizations (NGOs) often prioritize economic empowerment programming over social- and political empowerment projects. This paper then examines economic empowerment programs implemented by NGOs in Syrian refugee camps in Jordan, to investigate the implications of placing the burden of poverty in “third world” countries on women and their wombs. Throughout, the paper questions whether encouraging women to join the workforce is truly the best way to promote women’s empowerment.

“You have to get into it to see how much development is an alibi for exploitation, how much it’s a scam: the responsibility for the entire world’s ills is between the legs of the poorest women of the South.”¹

— Gayatri Chakravorty Spivak in an interview after the Cairo UN Conference on Population and Development in 1994

Notes

¹ Nermeen Shaikh, “Gayatri Chakravorty Spivak,” in *The Present as History: Critical Perspectives on Contemporary Global Power* (New York: Columbia University Press, 2007), 194.

Eugenics and the Economics of Population and Poverty

The debate surrounding the impact of fertility and population growth on the economy has influenced how governments and development-minded nongovernmental organizations (NGOs) approach sexual and reproductive health in the modern era. The relationship between fertility and the economy has also shaped the way that development NGOs seeking to “empower” women prioritize programs that focus on economic empowerment. Since the time of Thomas Malthus—eighteenth-century economist who theorized that food production would be unable to keep up with population growth, leading to devastating food shortages—economists have debated the link and causality between population growth and poverty within a development context.² These debates have a dark history of racist, sexist, and classist forced-sterilization and population-control programs. Many of the most well known and celebrated birth control advocates, including Marie Stopes and Margaret Sanger, expressed eugenic sentiments on the subjects of racial purity and mental hygiene.³ During the colonial period, the British eugenics movement spread and implanted itself abroad, sparking the establishment of new eugenics societies and organizations. These organizations advocated for poor women to use contraception or be sterilized in order to create a more fit and hygienic population—a population that would lift “underdeveloped” countries out of poverty.⁴ This history shows that discussions of population growth and fertility rates in impoverished parts of the world are innately racialized and gendered. Furthermore, eugenic ideas about the fertility of women in “developing countries” have been appropriated within the development context, framing women as overly fecund and as potential barriers to economic development.

Since the colonial era, advocating for the use of contraceptives has been a key part of fighting “third world” poverty within a development framework. Similar population-control programs advocated for the sterilization of disabled individuals

² Donald Gunn MacRae, “Thomas Malthus: English Economist and Demographer,” *Encyclopedia Britannica*, last modified April 5, 2019, <https://www.britannica.com/biography/Thomas-Malthus>.

³ Zoe Williams, “Marie Stopes: A Turbo-Darwinist Ranter, but Right about Birth Control,” *Guardian*, September 2, 2011, <https://www.theguardian.com/theguardian/2011/sep/02/marie-stopes-right-birth-control>; Jennifer Latson, “Margaret Sanger, Race and Eugenics: A Complicated History,” *Time*, October 14, 2016, <http://time.com/4081760/margaret-sanger-history-eugenics/>.

⁴ Chloe Campbell, “Eugenics in Colonial Kenya,” in *The Oxford Handbook of the History of Eugenics*, ed. Alison Bashford and Philippa Levine (United Kingdom: Oxford University Press, 2018), 229, <http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780195373141.001.0001/oxfordhb-9780195373141-e-17>.

and women of color in the United States.⁵ Before we delve into the more recent economic theory surrounding fertility and economic development, we therefore must recognize the damage that forced sterilization and coercive family-planning techniques have done in the name of combating poverty. This history should remind us to question exactly whom sexual- and reproductive-health programs are designed to benefit, and whether those programs take into account the lived experiences of the women they are supposed to serve.

Most economists agree that as incomes increase, fertility rates decrease; as people earn more money, they have fewer children.⁶ No such consensus exists, however, on whether “reduced fertility improve[s] the economic prospects of families and societies.”⁷ Those who followed the teachings of Malthus believed that high fertility rates would keep states stuck in conditions of “underdevelopment” and poverty; only under conditions of slow population growth could states prosper, they believed.⁸

After World War II, a neo-Malthusian school of thought gained prominence, arguing that high rates of population growth damage the potential for development. These economists believed that to promote economic development, states should implement population-control policies.⁹ A 1986 report released by the US National Research Council, however, argued that although high fertility rates do have the potential to limit economic development, the extent is not so great as the neo-Malthusians had claimed. The report stated that population growth is only one of the many conditions that affect development and that when it does, the effects are usually weak.¹⁰

Since the publication of this influential report, other development economists, such as David Bloom and David Canning, have examined the impact of population growth and demographic change on the economy.¹¹ They theorize that as a state’s fertility rates decrease, more of the state’s population falls between

⁵ “Black Genocide,” *American Experience*, PBS, accessed April 30, 2019, <https://www.pbs.org/wgbh/americanexperience/features/pill-black-genocide/>.

⁶ Steven W. Sinding, “Population, Poverty and Economic Development,” *Philosophical Transactions of the Royal Society B* 364, no. 1532 (October 27, 2009): 3023, <https://doi.org/10.1098/rstb.2009.0145>.

⁷ Sinding, “Population,” 3023.

⁸ Sinding, “Population,” 3024.

⁹ Sinding, “Population,” 3024.

¹⁰ Sinding, “Population,” 3024.

¹¹ David E. Bloom and David Canning, “Booms, Busts, and Echoes: How the Biggest Demographic Upheaval in History Is Affecting Global Development,” *Finance and Development* 43, no. 3 (September 2006), <https://www.imf.org/external/pubs/ft/fandd/2006/09/bloom.htm>.

the ages of 15 and 65 years. This “demographic bonus” means that more of the population can participate in the workforce and less of the population is reliant on social services.¹² In his article “Population, Poverty and Economic Development,” Steven W. Sinding explains that, “assuming countries also pursue sensible pro-growth economic policies, the demographic bonus ought to translate into a jump in income per capita.”¹³ Sinding therefore argues for fertility-control programs to be integrated into states’ comprehensive economic development plans¹⁴ and that decreasing fertility will not solve the issue of poverty on its own but may be “a necessary condition” of economic growth.¹⁵

Economists have long framed women and their ability to reproduce as a primary burden of economic development. Responsibility for a successful global future is placed, in part, on the backs—or in the wombs—of women in the “third world.” Even though Sinding argues that countries must implement projects other than population control to promote development, women are still constructed as opportunities for economic growth. Speaking years after the 1994 Cairo UN Conference on Population and Development, Gayatri Spivak reflected,

It was so clear that everybody, some in a benevolent way, some in a hardly disguised malevolent way, were thinking to stop poor Third World women from having children would save all the world’s problems. ... The fact that one Euro-American child consumes 183 times what one Third World child consumes was never thought of, much less articulated.¹⁶

It is easy to speak of women in the detached theoretical language of economics, but we must remember that the essentializing of women by NGOs and governments alike as baby-makers has tangible consequences. It affects the programs that NGOs adopt and presents women who have many children as the primary reason their families remain in poverty. This view of the relationship between reproduction and poverty has led many NGOs to overlook the importance of the unpaid care work involved in birthing and raising children in favor of

¹² Sinding, “Population,” 3024.

¹³ Sinding, “Population,” 3024.

¹⁴ Sinding, “Population,” 3030.

¹⁵ Sinding, “Population,” 3030.

¹⁶ Shaikh, “Gayatri Chakravorty Spivak,” 194.

programs that encourage women to find paid work outside the home. Framing women's reproductive behavior as an economic tool to fight poverty has the dangerous consequence of erasing the desires and life choices of individual women.

We should note that NGOs' fixation on economic development is part of the much larger neoliberal system within which Western NGOs operate on the global stage. Much simplified, neoliberal ideology celebrates the free market and holds that maintaining economic growth is the best way to "achieve human progress."¹⁷ As would be expected in a free-market capitalist system, NGOs depend on donors for funding to carry out their programming. Often, these funders dictate how the NGOs spend their money and craft their development agendas.¹⁸ Despite the separation from governments indicated by their name, NGOs do receive funding from governments and are hired as subcontractors by local governments.¹⁹ This means that NGOs must account for the money they receive in documentable and quantifiable ways, as well as demonstrate that their programs align with the specified interests of the states that fund them.²⁰ In his article "NGOs and Western Hegemony: Causes for Concern and Ideas for Change," Glen W. Wright argues that this accountability to governments has led NGOs to be less accountable to the people who are supposed to be benefiting from their services.²¹

As Wright points out, Western standards of accountability privilege "numbers, statistics, and efficiency over the qualitative aspects of development" that might take into account local cultures and norms.²² He argues that NGOs may avoid implementing programming that will not yield a short-term measurable result; instead, they opt for setting goals that are easier to measure, "at the expense of a more holistic approach."²³ For example, an NGO funded by the World Bank and the US government might be particularly attracted to programs that aim to increase employment and workforce participation or to decrease fertility rates by

¹⁷ Nicola Smith, "Neoliberalism," *Encyclopaedia Britannica*, accessed April 30, 2019, <https://www.britannica.com/topic/neoliberalism>.

¹⁸ Nidhi Srinivas, "Against NGOs? A Critical Perspective on Nongovernmental Action," *Nonprofit and Voluntary Sector Quarterly* 38, no. 4 (August 1, 2009): 619, <https://doi.org/10.1177/0899764009334308>.

¹⁹ James Petras, "NGOs: In the Service of Imperialism," *Journal of Contemporary Asia* 29, no. 4 (January 1999): 433, <https://doi.org/10.1080/00472339980000221>.

²⁰ Glen W. Wright, "NGOs and Western Hegemony: Causes for Concern and Ideas for Change," *Development in Practice* 22, no. 1 (February 1, 2012): 126, <https://doi.org/10.1080/09614524.2012.634230>.

²¹ Wright, "NGOs and Western Hegemony," 126.

²² Wright, "NGOs and Western Hegemony," 126.

²³ Wright, "NGOs and Western Hegemony," 126.

preventing unwanted pregnancies. This is not to say that these are not worthy causes, but focusing on quantitative results may lead this NGO to overlook the lived experiences, shaped by culture and society, of the people it intends to serve. The programs that lend themselves to these quantitative results may not align with the needs and desires of the target population.

International Development and Women's Empowerment

The global neoliberal system also shapes the lens through which many NGOs view empowerment. Their accountability to governments and other capitalist institutions dictates the areas in which they attempt to empower people in “third world” nations. NGOs tend to focus more on local systems of oppression and disempowerment than on global ones. For example, even though “the male dominated elite world of IMF [International Monetary Fund] privatizations, multinational corporations and local landlords” could certainly be accused of exploiting poor men and women in the “third world,” NGOs more often focus on the “‘patriarchy’ in the household, family violence, divorce, [and] family planning.”²⁴ Of course, exploitation should be condemned no matter where it takes place, but it is crucial to note what kinds of disempowerment and exploitation NGOs fixate upon and which they overlook. As James Petras asserts in his article “NGOs: In the Service of Imperialism,” in their programs to promote gender equality and women’s empowerment, NGOs ignore the areas in which white men are the oppressors and focus instead on local systems of oppression in which “the exploited and impoverished male worker/peasant emerges as the main villain.”²⁵ The programs that attempt to empower women economically by helping them join the workforce and earn money for their families, and thereby promote the economic growth of the state, are therefore often not addressing the systemic exploitation of workers within a free market economy. While some women may feel empowered by working outside the home, other women may feel less empowered in low-wage positions, exploited by wealthy business owners, than they were at home, taking care of their children.

²⁴ Petras, “NGOs,” 436; for more information about the human rights issues associated with privatization, see Philip Alston, “Report of the Special Rapporteur on Extreme Poverty and Human Rights,” United Nations General Assembly (September 26, 2018), https://srpoverty.org.files.wordpress.com/2018/10/a_73_396-sr-on-extreme-poverty-privatization.pdf.

²⁵ Petras, “NGOs,” 436.

That women's empowerment is characterized as an effective instrument of development can also help us investigate the divide between the rhetoric of NGOs and the subjective experience of their beneficiaries. The discussions surrounding empowerment as a goal of NGO programming demonstrate a neoliberal focus on economic empowerment and economic productivity. Rather than advocating for a holistic approach to improving women's overall well-being, NGOs increasingly pursue market-led growth in the communities and societies in which they operate.²⁶ Many NGOs appeal to their donors by exalting the economic benefits of empowering women. They argue that if a country's women learn vocational skills and join the workforce, the country will be able to grow its economy and reap considerable material benefits.²⁷ Many of the projects intended to economically empower women do not take women's long-term needs into consideration, however. For example, some programs provide short-term employment for women to mitigate the impact of male unemployment on the economy.²⁸ Economic empowerment programs may also inadvertently put women at risk of domestic violence from men who feel threatened or emasculated by women's increased economic power.²⁹ NGOs must place value on the lived experiences of women rather than on the assumption that entering the workforce will always improve women's lives, to better understand the unintended consequences of their programs.³⁰

As noted before, viewing women in the "developing world" as economic opportunities rather than as human beings who deserve to live fulfilling and healthy lives is pervasive in international development rhetoric. The World Bank has channeled this sentiment into a pithy slogan that accompanies many of its gender-

²⁶ Rosalind Eyben and Rebecca Napier-Moore, "Choosing Words with Care? Shifting Meanings of Women's Empowerment in International Development," *Third World Quarterly* 30, no. 2 (March 1, 2009): 296, <https://doi.org/10.1080/01436590802681066>.

²⁷ Eyben and Napier-Moore, "Choosing Words with Care," 294.

²⁸ Nandita Dogra, "The Mixed Metaphor of 'Third World Woman': Gendered Representations by International Development NGOs," *Third World Quarterly*, 32, no. 2 (March 30, 2011): 340, <https://doi.org/10.1080/01436597.2011.560472>.

²⁹ Chilla Bulbeck, "Hailing the 'Authentic Other': Constructing the Third World Woman as Aid Recipient in Donor NGO Agendas," in *Sustainable Feminisms*, ed. Sonita Sarker, vol. 11, *Advances in Gender Research* (Bingley, United Kingdom: Emerald Group Publishing, 2007), 59–73, [https://doi.org/10.1016/S1529-2126\(07\)11004-3](https://doi.org/10.1016/S1529-2126(07)11004-3).

³⁰ For more information about the intersection of economic empowerment and domestic violence, see Mara Bolis and Christine Hughes, "Women's Economic Empowerment and Domestic Violence," Oxfam, N.d., https://www.oxfamamerica.org/static/media/files/Womens_Empowerment_and_Domestic_Violence_-_Boris__Hughes_hX7LscW.pdf.

equality and women's empowerment plans: "The empowerment of women is smart economics."³¹ Rosalind Eyben and Rebecca Napier-Moore report in their article "Choosing Words with Care? Shifting Meanings of Women's Empowerment in International Development" that on International Women's Day in 2009, the Director General of UNESCO wrote, "Gender equality is smart and just economics for many compelling reasons. It can act as a force for economic development and for improving the quality of life of society as a whole."³² Clearly, it is not sufficient to promote gender equality and women's empowerment for their own sake; gender equality and women's empowerment become attractive to donors only when donors realize they will benefit financially from the programs they support.

The attractiveness of an economic justification for women's empowerment within a neoliberal society is perhaps best demonstrated by Nike's 2015 Girl Effect campaign.³³ Speaking about the campaign, Nike CEO Mark Parker stated, "Economists have demonstrated that [investing in girls] is the best possible return on investment."³⁴ This multinational corporation is not particularly well known for treating its workers in the "third world" justly, yet Nike's campaign was not aimed at improving the working conditions in the sweatshops where women make its popular clothing and gear.³⁵ The corporation was, in fact, using the attractive rhetoric of women's empowerment to advertise its goods. By drawing upon this theme, corporations like Nike, which exploits low-wage workers, benefit monetarily by making charitable and benevolent appeals to their consumers. Again, institutions like Nike rely on women whom the neoliberal economic system has abused and exploited for cheap labor, simultaneously using the women's suffering as justification for programs that may not even address the issues that affect these women the most.

Moreover, this focus on economic empowerment as a tool of international development strategically overlooks the exploitation and marginalization that many women experience when they enter the workforce.³⁶ As Eyben and Napier-Moore assert, development NGOs have centered a definition of empowerment that focuses on "formal institutions and individual autonomy."³⁷ The authors go on to argue,

³¹ Eyben and Napier-Moore, "Choosing Words with Care," 293.

³² Eyben and Napier-Moore, "Choosing Words with Care," 293.

³³ Arianne Shahvisi, "'Women's Empowerment,' Imperialism, and the Global Gag Rule," *Kohl: A Journal for Body and Gender Research* 4, no. 2 (Winter 2018): 174.

³⁴ Shahvisi, "'Women's Empowerment,'" 174.

³⁵ Shahvisi, "'Women's Empowerment,'" 174.

³⁶ Shahvisi, "'Women's Empowerment,'" 177.

³⁷ Eyben and Napier-Moore, "Choosing Words with Care," 293.

“Even with autonomy the emphasis is more on the economic actor contributing to growth, and less on, say, decent work and the unpaid care economy—and even less on issues of bodily autonomy and the power within.”³⁸ Placing such an emphasis on economic empowerment is often more beneficial to governments and institutions than it is for the women who are supposed to be benefitting from these programs. A focus on growth leads NGOs and other international actors to ignore the real needs and desires of women living in poverty. How can economic empowerment programs be truly empowering if they do not address the exploitation of women within the global neoliberal system? If being economically empowered means having the ability to make economic decisions, then organizations should not devalue the desire of some women to care for their children or to avoid exploitative jobs. Instead, organizations should engage with the women they are trying to empower and should find ways to merge unpaid labor with formal work—ways that fit with, rather than overlook, the women’s own desires and responsibilities.

Syrian Refugees and Economic Empowerment

The experiences of Syrian refugees in Jordan can further demonstrate the limitations of economic empowerment programs. Most Syrian refugees in Jordan experience extreme financial insecurity, with 86 percent living below the Jordanian poverty line of 2.25 USD per day.³⁹ The unemployment rate in Jordan increased 22.1 percent between the start of the Syrian civil war (2011) and 2014.⁴⁰ Many Jordanian citizens therefore struggle to find employment and find themselves having to compete with Syrian refugees for jobs.⁴¹ In 2017, the government of Jordan and members of the international community, including the United Kingdom and the United Nations, agreed to a plan called the Jordan Compact, which intended to address these challenges.⁴² As UNICEF describes in a report, “the central pillar of the Compact is to turn the Syrian refugee crises into a development opportunity that attracts new investments and creates jobs for

³⁸ Eyben and Napier-Moore, “Choosing Words with Care,” 293.

³⁹ Women’s Refugee Commission, “Unpacking Gender: The Humanitarian Response to the Syrian Refugee Crisis in Jordan,” March 14, 2014, 7, <https://reliefweb.int/report/jordan/unpacking-gender-humanitarian-response-syrian-refugee-crisis-jordan>.

⁴⁰ Women’s Refugee Commission, “Unpacking Gender,” 7.

⁴¹ Women’s Refugee Commission, “Unpacking Gender,” 7.

⁴² UNICEF, “Empowering Syrian Refugee Women in Jordan,” June 2017, 3–4, https://www.unicefusa.org/sites/default/files/170615%20NextGen%20Jordan%20Full%20proposal_0.pdf.

Jordanians and Syrian refugees.”⁴³ In doing so, Jordan agreed to create 200,000 jobs for Syrians. The agreement thrilled the international community and resulted in pledges for \$12 billion in grants and \$40 billion in loans from Western nations—sums of money that dwarfed the \$3.2 billion that Western countries pledged to the humanitarian response to the Syrian refugee crisis.⁴⁴

Before the Compact, Syrian refugees were required to apply for work permits through the same process required for labor migrants.⁴⁵ The fees were high and required documentation that many refugees had left in Syria. Consequently, the Jordanian government issued only 3,000 work permits to Syrian refugees each year during the period leading up to the Jordan Compact.⁴⁶ According to a report by UN Women, “In 2017, as a result of policy reforms, the government issued 46,717 work permits, of which 5 percent were issued to women. This takes the total number of work permits issued as of April 2018 to 99,443, of which 45,850 are currently active.”⁴⁷ That only 5 percent of work permits were given to women in 2017 demonstrates the barriers Syrian women face in obtaining legal work. Moreover, UN Women found that male family members were more likely to be issued work permits than were female family members, and the men who did receive permits were more likely to be living in the urban centers of Amman and Irbid than in the rural areas of Jordan.⁴⁸

Because Syrian refugees, particularly women, have limited access to employment in Jordan, development NGOs have implemented programs aimed at increasing Syrian workforce participation. Because of the persistent difficulties of obtaining work permits, many of these are short-term cash-for-work programs that do not meet the long-term needs of refugees. For example, the Norwegian Refugee Council runs a cash-for-work program in which women “oversee the management of seedlings which will be planted in the Royal Botanical Garden.”⁴⁹ This provides both Syrian and Jordanian women with an opportunity to earn money needed to survive, yet each group of about twenty women works on this project for only forty

⁴³ UNICEF, “Empowering Syrian Refugee Women,” 3–4.

⁴⁴ Veronique Barbelet, Jessica Hagen-Zanker, and Dina Mansour-Ille, “The Jordan Compact: Lessons Learnt and Implications for Future Refugee Compacts,” ODI, February 2018, 3, <https://www.odi.org/sites/odi.org.uk/files/resource-documents/12058.pdf>.

⁴⁵ Barbelet, Hagen-Zanker, and Mansour-Ille, “Jordan Compact,” 4.

⁴⁶ Barbelet, Hagen-Zanker, and Mansour-Ille, “Jordan Compact,” 4.

⁴⁷ Women’s Refugee Commission, “Unpacking Gender,” 9.

⁴⁸ Women’s Refugee Commission, “Unpacking Gender,” 17.

⁴⁹ Lynn Qashu, “Empowering Women through Small-Scale Jobs,” Norwegian Refugee Council, July 6, 2018, <https://www.nrc.no/news/2018/july/empowering-women-through-small-scale-jobs/>.

days.⁵⁰ Even though these programs benefit women in the short term, they leave women constantly searching for their next cash-for-work opportunity.

In an article that helped inspire the Jordan Compact, Alexander Betts and Paul Collier envisioned a plan to integrate refugees into their host country's economy.⁵¹ Using Jordan as a case study, the pair argued for "a reconsidered refugee policy [that] would integrate displaced Syrians into specially created economic zones, offering Syrian refugees employment and autonomy, incubating businesses in preparation for the eventual end of the civil war in Syria, and aiding Jordan's aspirations for industrial development."⁵² The idea of benefitting both the refugees who need ways to support themselves and their families while simultaneously helping Jordan achieve its development goals is incredibly attractive. Betts and Collier asserted that "special development zones" would provide refugees with "autonomy and opportunity" through integration into the global economy,⁵³ but the authors did not once mention Syrian refugee women in their article; they did not address the fact that women may not be able to pick up and leave their homes and their children to work in industrial zones every day.

A report by Oxfam detailing the organization's failed attempt to recruit Syrian women to formal work in a garment factory provides insight into the challenges faced specifically by women. More specifically, it demonstrates the shortcomings of economic integration programs, such as those envisioned by Betts and Collier, that overlook women's needs. The Oxfam report explains that there were only 5,000 cash-for-work jobs in Za'atari camp and only one third of these jobs were filled by women.⁵⁴ Ten thousand (10,000) work permits were granted to refugees living in Za'atari camp, but Oxfam reports that "these work permits are often used in unauthorized ways as entry and exit permits, exposing refugees to legal and protection risks when leaving the camp."⁵⁵ As a result, Oxfam created the Lel-Haya project, a cash-for-work program in which Syrian refugee women worked

⁵⁰ Qashu, "Empowering Women."

⁵¹ Alexander Betts and Paul Collier, "Help Refugees Help Themselves," *Foreign Affairs*, October 19, 2015, <https://www.foreignaffairs.com/articles/levant/2015-10-20/help-refugees-help-themselves>.

⁵² Betts and Collier, "Help Refugees Help Themselves."

⁵³ Betts and Collier, "Help Refugees Help Themselves."

⁵⁴ Shaddin Almasri, "Tailor Made: How Syrian Refugee Women Are Finding Their Own Way to Join the Jordanian Economy," *Oxfam International*, August 6, 2018, 3, <https://oxfamilibrary.openrepository.com/bitstream/handle/10546/620530/bn-jordan-tailor-made-women-refugees-070818-en.pdf>.

⁵⁵ Almasri, "Tailor Made," 3.

as seamstresses sewing old UNHCR tents into tote bags.⁵⁶ The employment office at the camp then worked with a garment factory located outside the camp to hold a job fair to recruit women into jobs at the factory. Even though the women participating in the Lel-Haya project were interested in formal work at the garment factory, most did not end up choosing to participate in the employment program.⁵⁷ Oxfam was surprised that the women chose not to join “despite childcare incentives of 25 Jordanian dinars (approximately \$35) per month provided by the factory for each child under the age of four, and ILO-arranged buses to transport women from their districts to the camp main gate.”⁵⁸ When Oxfam interviewed the women to find out why they had chosen not to work in the factory, the organization discovered a wide variety of reasons. First, the distance of the factory from the camp was a main barrier for the women, as they could not be away from their families all day. Some women who had children over the age of four—and were therefore not eligible for the childcare incentive—could not afford to pay someone to watch their children. Many women feared leaving their children at home alone, as the shelters could easily catch on fire.⁵⁹ Additionally, women were discouraged by the fact that they could not easily and cheaply return to the camp in case of emergency; cheap transportation was often considered unsafe, and taxis were too expensive.⁶⁰ Women also realized that if they worked at the factory during the day, they would miss aid distributions in the camp. Some women chose not to participate because they had heard that treatment of workers was bad in the factories. Another main barrier was that only women under 35 were eligible to work in the factory, which excluded older skilled seamstresses who were interested in the program.⁶¹

This case demonstrates some of the challenges that Jordan and the international community would face if they decided to integrate Syrian refugees into “special economic zones” as Betts and Collier suggested.⁶² There is simply no easy way to ensure that Syrian refugees can earn money and develop skills that will help them survive once the civil war is over; however, it is clear that seeking to integrate refugees into the Jordanian economy without considering the actual lived experiences of women will be ineffectual. Employment programs such as this one may be beneficial to regional and global economies, but they will not succeed in

⁵⁶ Almasri, “Tailor Made,” 3.

⁵⁷ Almasri, “Tailor Made,” 3.

⁵⁸ Almasri, “Tailor Made,” 4.

⁵⁹ Almasri, “Tailor Made,” 4.

⁶⁰ Almasri, “Tailor Made,” 4.

⁶¹ Almasri, “Tailor Made,” 4.

⁶² “Help Refugees Help Themselves.”

their goals of empowering Syrian women. Women must be able to carry out their roles as mothers and wives if they so desire. Separating women from their families and then considering the women empowered ignores their lived experiences. Women should be able to work close to their homes, and thus the cost and efficiency of transportation must be improved. This would likely include creating formal work programs within the camps. There should also be improved access to affordable childcare and flexible working schedules. Most importantly, there should be open communication with Syrian women (and men) to identify other ways to improve access to formal work that enables women to also carry out their roles as mothers and wives.

Western Feminism and the Patriarchy

Western feminist agendas have also influenced the ways that NGOs approach women's empowerment. The issues that are most important to Western feminists working for and funding NGOs may not resonate with women from the "third world."⁶³ As a result, the projects they prioritize "are not always considered the most pressing by activists and grassroots women in the aid-receiving countries."⁶⁴ In her article "Hailing the 'Authentic Other': Constructing the Third World as Aid Recipient in Donor NGO Agendas," Chilla Bulbeck points out the example of the Ford Foundation's work in China. She explains that local organizations have criticized reproductive-health projects "as reflecting Western notions of individualism, informed consent and choice."⁶⁵ This is not to say that this reaction was universal, but it does demonstrate how Western feminist ideals are exported to the "third world," where they may not align with local cultures, practices, and beliefs. If these feminist organizations listen to women from the communities they are trying to help, women who may have different ideas about feminism and empowerment, perhaps the organizations would be able to implement more successful agendas.

The Western feminist perceptions of patriarchy also demonstrate the potential gap between NGOs' ideas of empowerment and those of women on the ground. There is a persistent idea that women's empowerment is impossible within a patriarchal system, that women's empowerment and patriarchy are mutually exclusive. We see this exemplified in Valentine M. Moghadam's book *From Patriarchy to Empowerment*, the title of which alone suggests that patriarchy makes

⁶³ Bulbeck, "Hailing the 'Authentic Other,'" 60.

⁶⁴ Bulbeck, "Hailing the 'Authentic Other,'" 64.

⁶⁵ Bulbeck, "Hailing the 'Authentic Other,'" 68.

empowerment impossible.⁶⁶ In her introduction, Moghadam describes the Middle East, North Africa, and South Asia as part of “the patriarchal belt” and explains that this system of patriarchy has had “dire implications for women’s status and life chances.”⁶⁷ She urges an immediate shift from patriarchy to empowerment.⁶⁸ Although Moghadam does acknowledge the “emergence of vibrant women’s movements” in the region, her statement seems to suggest that women are unable to exert power and agency from within patriarchal social structures.⁶⁹ She feeds into the assumption that “a timeless, fixed notion of female inferiority exists in the [third world].”⁷⁰ It is this assumption that leads development organizations to essentialize the experiences of poor women as victims who need to be saved from the binds of the patriarchy.

I am not arguing that NGOs should ignore the restrictions imposed upon women in patriarchal societies. What I am arguing for is a more nuanced look at the unintended consequences of painting women as the victims of oppression, utterly lacking agency and power. In her article “The Mixed Metaphor of ‘Third World Woman’: Gendered Representations by International Development NGOs,” Nandita Dogra demonstrates the consequences of simplifying the lived experiences of women in societies considered oppressive by the West. She discusses Oxfam and World Vision’s Christmas gift catalogues, which listed “the cost of running a training kit for women against domestic violence” as one of the possible gifts people could buy.⁷¹ Dogra argues that this seemingly benign “gift” assumes that if women from the “third world” could learn that “domestic abuse is wrong,” they would stand up against it.⁷² The training kit draws on the Western assumption that rights are individual and “makes this rights discourse ‘victim-centered and retrospective’ but ‘removed from broader frames of analysis, engagement, and action.’”⁷³ In reality, Dogra points out, women from the global south and the global north “negotiate” and prioritize different interests depending on which needs they view as the most important in any given moment, even if this comes at the expense

⁶⁶ Valentine M. Moghadam, ed., “Women’s Empowerment: An Introduction and Overview,” in *From Patriarchy to Empowerment: Women’s Participation, Movements, and Rights in the Middle East, North Africa, and South Asia* (NY: Syracuse University Press, 2007).

⁶⁷ Moghadam, “Women’s Empowerment,” 1–2.

⁶⁸ Moghadam, “Women’s Empowerment,” 2.

⁶⁹ Moghadam, “Women’s Empowerment,” 2.

⁷⁰ Dogra, “Mixed Metaphor,” 341.

⁷¹ Dogra, “Mixed Metaphor,” 341.

⁷² Dogra, “Mixed Metaphor,” 341.

⁷³ Dogra, “Mixed Metaphor,” 342.

of other interests,⁷⁴ and a training kit dedicated to teaching women that domestic abuse is wrong ignores this complexity:

At best this is another success for the NGO and at its worst it is an erasure of the complex ways in which [third world] women negotiate their interests *by themselves* as well as of the long history of feminism, awareness and conscientisation *within* [third world] nations. Instead of interventions of sensitization, the (largely missing) portrayals of [third world] women as protestors, for example, could show both agency and knowledge on their part. The existing representations merely become yet more examples of [third world] women as “the passive dupes of patriarchal culture” and “inherently incapable of solving their own problems.”⁷⁵

Here, Dogra eloquently lays out the damage that can be done when NGOs essentialize the experience of women from the “third world” as oppressed by patriarchy and entirely lacking agency and power. A training kit to sensitize women to domestic violence does not pay attention to the hundreds of decisions women must make every day, the agency they exert, and the ways that they negotiate their interests and fulfill their needs from within a social system in which men tend to monopolize authority. The persistent idea that all women from “third world” countries lack agency and must be empowered by Western NGOs can lead these organizations to implement well-meaning but ineffectual programs—programs that ignore the needs and desires of their supposed beneficiaries.

The Crucial Contradiction

The portrayal of “third world” women in NGO materials, paired with the neoliberal preference for low fertility rates, exposes a crucial contradiction within international development: Women are deserving of aid but are also simultaneously fecund and over-reproductive.⁷⁶ They are portrayed as selfless, feminized mothers, worthy recipients of aid from development NGOs, and are also expected to

⁷⁴ Dogra, “Mixed Metaphor,” 342.

⁷⁵ Dogra, “Mixed Metaphor,” 342.

⁷⁶ Dogra, “Mixed Metaphor,” 336.

contribute to economic development by escaping patriarchal gender norms, having fewer children, and joining the workforce. NGOs both “other” and universalize women from the “third world,” Dogra argues.⁷⁷ In a study she conducted of NGO messages in newspapers in the United Kingdom between 2005 and 2006, Dogra found that 72 percent of people shown in images were mothers and their children.⁷⁸ The images show women and children suffering and vulnerable, facing devastating conditions of famine and poverty. In a similar way to the training kits mentioned before, “Such images in essence project the women (and children) as a homogeneously powerless group of innocent victims.”⁷⁹ Images portraying impoverished women holding their babies evoke the universalism of motherhood. Dogra poignantly connects these images with “the many iconic Madonna and child paintings, where a shoulder or another body part of the mother is revealed to signify a physicality and bond between mother and child.”⁸⁰ These women are at once relatable and worthy of aid to a Western audience of potential donors, and also sufficiently apolitical and vulnerable so as to not be threatening or suspicious. Women are again instruments of development because they are “ideal victims.”⁸¹

As discussed before, however, women in the “third world” are not celebrated for having many children. The images of poor women holding their children fit within the racialized “colonial discourse” of women of color being overly fertile and hypersexual.⁸² Dogra asserts that this eugenic and racist narrative was “transformed within the development discourse into the overcrowded [third world], with its over-reproductive women who have a ‘tendency to breed like rabbits.’”⁸³ Women from the “third world” are blamed for not limiting their reproduction and for thereby perpetuating poverty and economic depression. The contradiction that arises when women are characterized as worthy aid recipients and tools of development, as well as fecund and overly reproductive, demonstrates the illogically essentialized identity of “third world” women. By recognizing this contradiction, development organizations may be better equipped to actually improve the lives of the women they aim to empower.

⁷⁷ Dogra, “Mixed Metaphor,” 335.

⁷⁸ Dogra, “Mixed Metaphor,” 335.

⁷⁹ Dogra, “Mixed Metaphor,” 335.

⁸⁰ Dogra, “Mixed Metaphor,” 335.

⁸¹ Dogra, “Mixed Metaphor,” 335.

⁸² Dogra, “Mixed Metaphor,” 336.

⁸³ Dogra, “Mixed Metaphor,” 336.

Bibliography

- Almasri, Shaddin. "Tailor Made: How Syrian Refugee Women Are Finding Their Own Way to Join the Jordanian Economy." Oxfam International. August 6, 2018.
<https://oxfamilibrary.openrepository.com/bitstream/handle/10546/620530/bn-jordan-tailor-made-women-refugees-070818-en.pdf>.
- Barbelet, Veronique, Jessica Hagen-Zanker, and Dina Mansour-Ille. "The Jordan Compact: Lessons Learnt and Implications for Future Refugee Compacts." ODI. February 2018. <https://www.odi.org/sites/odi.org.uk/files/resource-documents/12058.pdf>.
- Betts, Alexander, and Paul Collier. "Help Refugees Help Themselves." *Foreign Affairs*, October 19, 2015.
<https://www.foreignaffairs.com/articles/levant/2015-10-20/help-refugees-help-themselves>.
- "Black Genocide." *American Experience*. PBS. Accessed April 30, 2019.
<https://www.pbs.org/wgbh/americanexperience/features/pill-black-genocide/>.
- Bloom, David E., and David Canning. "Booms, Busts, and Echoes: How the Biggest Demographic Upheaval in History Is Affecting Global Development." *Finance and Development* 43, no. 3 (September 2006).
<https://www.imf.org/external/pubs/ft/fandd/2006/09/bloom.htm>
- Bolis, Mara, and Christine Hughes. "Women's Economic Empowerment and Domestic Violence." Oxfam. N.d.
https://www.oxfamamerica.org/static/media/files/Womens_Empowerment_and_Domestic_Violence_-_Boris__Hughes_hX7LscW.pdf.
- Bulbeck, Chilla. "Hailing the 'Authentic Other': Constructing the Third World Woman as Aid Recipient in Donor NGO Agendas." In *Sustainable Feminisms*, edited by Sonita Sarker, 59–73. Vol. 11 of *Advances in Gender Research*. Bingley, United Kingdom: Emerald Group Publishing, 2007. [https://doi.org/10.1016/S1529-2126\(07\)11004-3](https://doi.org/10.1016/S1529-2126(07)11004-3).
- Campbell, Chloe. "Eugenics in Colonial Kenya." In *The Oxford Handbook of the History of Eugenics*, edited by Alison Bashford and Philippa Levine, 290–98. United Kingdom: Oxford University Press, 2018.

<http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780195373141.001.0001/oxfordhb-9780195373141-e-17>.

- Dogra, Nandita. "The Mixed Metaphor of 'Third World Woman': Gendered Representations by International Development NGOs." *Third World Quarterly* 32, no. 2 (March 30, 2011): 333–48. <https://doi.org/10.1080/01436597.2011.560472>.
- Eyben, Rosalind, and Rebecca Napier-Moore. "Choosing Words with Care? Shifting Meanings of Women's Empowerment in International Development." *Third World Quarterly* 30, no. 2 (March 1, 2009): 285–300. <https://doi.org/10.1080/01436590802681066>.
- MacRae, Donald Gunn. "Thomas Malthus: English Economist and Demographer." *Encyclopaedia Britannica*. Article modified April 5, 2019. <https://www.britannica.com/biography/Thomas-Malthus>.
- Moghadam, Valentine M., ed. "Women's Empowerment: An Introduction and Overview." In *From Patriarchy to Empowerment: Women's Participation, Movements, and Rights in the Middle East, North Africa, and South Asia*, 1–13. NY: Syracuse University Press, 2007.
- Petras, James. "NGOs: In the Service of Imperialism." *Journal of Contemporary Asia* 29, no. 4 (January 1999): 429–40. <https://doi.org/10.1080/00472339980000221>.
- Qashu, Lynn. "Empowering Women through Small-Scale Jobs." Norwegian Refugee Council. July 6, 2018. <https://www.nrc.no/news/2018/july/empowering-women-through-small-scale-jobs/>.
- Shahvisi, Arienne. "'Women's Empowerment,' Imperialism, and the Global Gag Rule." *Kohl: A Journal for Body and Gender Research* 4, no. 2 (Winter 2018): 174–84.
- Shaikh, Nermeen. "Gayatri Chakravorty Spivak." In *The Present as History: Critical Perspectives on Contemporary Global Power*, 172–202. New York: Columbia University Press, 2007.
- Sinding, Steven W. "Population, Poverty and Economic Development." *Philosophical Transactions of the Royal Society B* 364, no. 1532 (October 27, 2009): 3023–30. <https://doi.org/10.1098/rstb.2009.0145>.

- Smith, Nicola. "Neoliberalism." *Encyclopaedia Britannica*. Accessed April 30, 2019. <https://www.britannica.com/topic/neoliberalism>.
- Srinivas, Nidhi. "Against NGOs? A Critical Perspective on Nongovernmental Action." *Nonprofit and Voluntary Sector Quarterly* 38, no. 4 (August 1, 2009): 614–26. <https://doi.org/10.1177/0899764009334308>.
- UNICEF. "Empowering Syrian Refugee Women in Jordan." June 2017. https://www.unicefusa.org/sites/default/files/170615%20NextGen%20Jordan%20Full%20proposal_0.pdf.
- Williams, Zoe. "Marie Stopes: A Turbo-Darwinist Ranter, but Right about Birth Control." *Guardian*, September 2, 2011. <https://www.theguardian.com/theguardian/2011/sep/02/marie-stopes-right-birth-control>.
- Women's Refugee Commission. "Unpacking Gender: The Humanitarian Response to the Syrian Refugee Crisis in Jordan." March 14, 2014. <https://reliefweb.int/report/jordan/unpacking-gender-humanitarian-response-syrian-refugee-crisis-jordan>.
- Wright, Glen W. "NGOs and Western Hegemony: Causes for Concern and Ideas for Change." *Development in Practice* 22, no. 1 (February 1, 2012): 123–34. <https://doi.org/10.1080/09614524.2012.634230>.