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An Evidence-based Practice Project: Using Cryotherapy for Headaches

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Abstract

This evidence-based practice project addresses the use of cryotherapy as an intervention in reducing the symptom of pain in patients with headaches. A literature review was conducted using PubMed, ProQuest Nursing and Allied Health, Cochrane Reviews, and Cumulative Index to Nursing and Allied Health Literature (CINAHL). The articles identified were evaluated to determine evidence level and quality. Seven articles were determined to be eligible to answer the following PICO question: In patients with headaches (P), how does cryotherapy (I) compare to standard care (C) with pain (O)? A total of seven articles were used in the review. Level I, II, IV, and V articles were identified ranging from high quality (A) to good quality (B). Each article focused on using cryotherapy in treating pain during headaches, either in conjunction with other analgesia or on its own. Each article identified an overall positive effect on pain. There is compelling evidence to treat a headache with cryotherapy. The recommendation includes using an ice or cool gel pack in conjunction with the standard treatment of headache to relieve headache pain.

Keywords: migraine(s), headache(s), cryotherapy, ice pack, ice therapy, cool pack, pain, and analgesia

Introduction

Headaches are a common and debilitating disorder. There are multiple type of headache disorders, including migraine headaches, cluster headaches, and tension headaches (World Health Organization [WHO], 2016). It is estimated that over one billion people worldwide experience migraine headaches (Amiri et al., 2022). Migraines can be associated with various symptoms, including pain, nausea, photophobia (sensitivity to light), phonophobia (sensitivity to sound), and sometimes an aura. Migraines are the sixth highest cause in the world of years lost due to a disability, meaning a person’s quality of life is negatively impacted due to the disorder (WHO, 2016). According to the WHO, an estimated 50% of individuals with migraines have seen a doctor within a year for headache-related reasons in the United Kingdom and the United States.

Headaches are a prevalent, debilitating disorder nurses will most likely encounter during their careers. The current practice regarding treatment at home includes pharmacological treatments, including nonsteroidal anti-inflammatory drugs (NSAIDs), acetaminophen, and triptans (American Headache Society, 2018). In nursing, a multimodal approach is critical to care for a patient. A nurse should be able to provide nonpharmacological interventions to help relieve a patient’s pain such as a cold compress and ice, collectively referred to in this evidence-based practice (EBP) project as cryotherapy (Hsu et al., 2022). Ice has been used to relieve pain in many instances due to its numbing effect and reduction of inflammation and swelling (Johns Hopkins Medicine, n.d.).

The purpose of this EBP project is to evaluate the use of cold packs, or cryotherapy, to help decrease the symptom of pain caused by headaches. The current literature was synthesized and translated into a recommendation for possible organizational change.

PICO Question

The PICO strategy facilitated this EBP project. PICO stands for population (P), intervention (I), comparison (C), and outcome (O). The following PICO question was used for the EBP project: In patients with headaches (P), how does cryotherapy (I)
compare to standard care (C) with pain (O)?

Methodology

Search Strategy

A literature search was conducted to help answer the PICO question. The following databases were searched: PubMed, ProQuest Nursing and Allied Health, Cochrane Reviews, and Cumulative Index to Nursing and Allied Health Literature (CINAHL). The search keywords used in the databases include migraine(s), headache(s), cryotherapy, ice pack, ice therapy, cool pack, pain, and analgesia. Search strategy filters were also used during searching. All articles were peer-reviewed, written in English, and published in the last five years (January 2018 to March 2023). Hand searching was used in this EBP project to identify relevant articles and seminal work in the field. The search strategy is described further in Appendix A.

A total of 481 articles were identified. An additional six articles were identified using hand searching. After screening, 15 articles were identified through searching the databases as eligible for full review. The articles identified were reviewed in full text for relevance to the PICO question; eight were excluded, leaving seven articles for a final review of the literature. Two of the articles identified are classified as seminal works (Diamond, S., 1986 & Robbins, L.D., 1989). The eight articles excluded were due to a lack of relevance to the PICO question. The PRISMA flow diagram is shown in Appendix B.

Review of the Literature

The final seven articles were evaluated for level of evidence and quality using the Johns Hopkins Evidence-Based Practice Model Appraisal tools for research and non-research articles (Dang et al., 2022). The level of evidence include a ranking system of level I through V based on the type of literature. Level I through III evidence are research. Examples of research evidence are randomized control trials (RCT) (Level I), quasi-experimental studies (Level II), and non-experimental studies (Level III). Level IV and V evidence are non-research literature. Examples of non-research evidence are clinical practice guidelines (Level IV) and literature reviews (Level V). The quality of the articles were rated “A,” “B,” or “C.” A grade of “A” signified a high-quality article, “B” signified a good-quality article, and “C” signified a low-quality article. A research article received an “A” rating if there were consistent results, with thorough evidence and definitive conclusions, “B” rating if there were reasonably consistent results, fairly thorough evidence, and fairly definitive conclusions, and “C” rating if there were inconsistent results with little evidence and unclear conclusions. A non-research article received an “A” rating if the article demonstrated clear expertise in the field, with scientific rational and definitive conclusions, “B” rating if the article appeared to demonstrate expertise in the field, provided a logical argument, and drew fairly definitive conclusions, and “C” rating if conclusions could not be drawn and expertise is unclear. Appendix C summarizes each of the seven final articles and lists the level of evidence and quality of evidence. A summary of the levels and quality of the evidence appraised is listed in Appendix D.

One systematic review with meta-analysis (Level II, A quality) was identified, which examined four randomized control trials and two quasi-experimental studies, totaling a sample size of 224 migraine patients (Hsu et al., 2022). The article supported the use of cryotherapy for migraines and identified a more significant decrease in migraine intensity immediately after the intervention (<30 minutes), with a decrease in pain level by 3.21 points (p=0.02). No statistical difference was found at one to two hours and at 24 hours post administration (p=0.07).

Two randomized control trials (RCTs) (Level I, with quality grades A and B), based in Brazil (Foralosso et al., 2019) and Iran (Bagherzadi et al., 2021), were found in the literature search. Each article supported the use of cryotherapy to relieve pain during a headache, showing a lowered pain intensity among participants. One of the RCT articles (n=75) focused on nitrate-induced migraines and found a statistically significant difference (p<0.05) between the control group using no heat or cold therapy for pain relief and the intervention group using cryotherapy on migraine pain intensity (Bagherzadi et al., 2021). The control group continued individual routine care; however, the study did not explain what the care consisted of. The intervention group used a cold compress on the neck twice during the migraine attack for 25 minutes
each, first at the onset of the migraine and again at the one-hour mark. After two hours, a pharmaceutical analgesic was provided to the participants. Headache intensity was measured using a zero to ten scale at the onset of migraine pain, after the first round of heat or cold therapy, and at an hour after the second round of an intervention. The study found there was a statistically significant difference between the intervention groups and control group. The other RCT (n=14) focused on using cryotherapy with tension headaches, using the cryotherapy intervention on the neck for 15 minutes (Foralosso et al., 2019). This RCT found that the pain intensity of the intervention group decreased significantly (p=0.0272) with cryotherapy.

Two seminal quantitative quasi-experimental research articles (Level II, B quality) based in the United States were identified (Diamond & Freitag, 1986; Robbins, 1989). Both articles supported cryotherapy as being effective in most patients with migraine headaches. A quasi-experimental study by Diamond & Freitag (1986) of 30 migraine patients, 80% found the cryotherapy intervention effective in conjunction with standard migraine abortive medications, for example analgesics, ergotamine, and oxygen muscle relaxants. This study noted that the cryotherapy intervention’s effectiveness decreased as the migraine intensity increased. This study had the participants use only their abortive medication for two headache attacks and the cryotherapy intervention in conjunction with their abortive medications for two headache attacks. A headache calendar was used to track the participants’ headaches, using a one to ten scale for headache intensity and pain relief. A quasi-experimental study by Robbins (1989) had 45 migraine patients or migraine and chronic headache patients to use a cold wrap for 20 to 30 minutes after migraine onset in conjunction with the patient’s standard migraine abortive medications. The medications they used were not identified. The study found that 64.6% of patients found mild, moderate, or complete effectiveness of the treatment, and 58% would use the intervention again. This study did not have a control group or measured headache intensity, but instead was based on the patients’ perception of pain and pain relief. Both quasi-experimental studies used the treatment in conjunction with patients’ standard abortive and prophylactic medications, supporting the effectiveness of cryotherapy treatment; however, there was not a control group in the studies.

Two non-research articles were identified during the literature search. A position statement from the European Headache Federation and the organization Lifting the Burden (Level IV, B quality), recognized the use of cold packs to help reduce headache pain, being low cost and relatively harmless (Steiner et al., 2019). A literature review identified that the use of cryotherapy can cause a reduction in inflammation, edema, and pain (Fishman et al., 2021). The article discusses the use of temperature-mediated nerve blocks on headache pain. The term “temperature-mediated nerve blocks” was used in this article to describe the use of heat or cold to alter the local neurovascular system to reduce pain. The literature review additionally supported that the use of cryotherapies for pain as low-cost and relatively safe.

The literature search recognized that the use of cryotherapy during migraines could help to reduce pain intensity; however, the type, length, and location of the intervention were inconsistent throughout the articles. Many types of cryotherapies were identified, including cold-gel headbands, cold-gel caps, skin temperature biofeedback, crushed ice in a plastic bag, intraoral cooling, and cold wrap with pressure. The intervention’s length differed from 15 minutes to 120 minutes or was not identified in some articles. The research articles varied on the exact location of the cryotherapy on the body, for example, the neck versus the forehead, and the non-research articles did not specify a location on the body to use cryotherapy. The research studies varied on the use of the intervention in conjunction with other analgesics, such as usual abortive medications used by the patients (Foralosso et al., 2019; Diamond & Freitag, 1986; Robbins, 1989), and as a stand-alone intervention (Bagherzadi, 2021). Although inconsistencies were noted in the literature, there is strong and compelling evidence to recommend translation to an organizational setting of providing cryotherapy to migraine patients in conjunction with pharmacological treatment.

Translation

Cryotherapy in the adjunctive treatment of migraines is a low-risk intervention with strong and
compelling evidence to indicate effectiveness on migraine pain. Cryotherapy can be used in conjunction with a patient’s standard abortive and prophylactic headache treatments. Adopting cryotherapy into practice is feasible, as no barriers have been identified currently. Most organizations have access to ice or gel packs that can be provided to patients. Ice or ice packs are generally low-cost for an organization. Cryotherapy can be added to any organization’s policy and procedures on current headache treatment plans. This recommendation applies to and answers the PICO question for this EBP project.

**Conclusion**

The purpose of this EBP project was to perform a comprehensive review of the literature and provide a recommendation for organizational translation for the following PICO question: In patients with headaches (P), how does cryotherapy (I) compare to standard care (C) with pain (O)? Seven articles were identified that helped answer the PICO question. The Johns Hopkins Evidence-Based Practice Model Appraisal tools were used to identify the level and quality of the evidence and helped draw the conclusion that there was strong and compelling evidence to implement cryotherapy for headache patients. The evidence consistently concluded that cryotherapy is effective in relieving headache pain. Cryotherapy is a low-cost, low-risk intervention that can be translated into daily practice to help relieve headache pain.

**References**


## Appendix A
### Search Strategy Table

<table>
<thead>
<tr>
<th>Date</th>
<th>Database</th>
<th>Keywords/Synonyms Phrase</th>
<th>Search Strategy*</th>
<th>Yield**</th>
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<td>2/6</td>
<td>PubMed</td>
<td>migraine OR headache AND ice OR cold OR cryotherapy AND pain</td>
<td>Publication date 5 years Language English</td>
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<td>Publication date 3 years Language English</td>
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</tr>
<tr>
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<td>Peer reviewed English Start year 2018</td>
<td>141 results Search aborted</td>
</tr>
<tr>
<td>2/13</td>
<td>CINAHL with Full Text</td>
<td>migraine* or headache* OR &quot;migraine headache*&quot; AND cryotherapy OR</td>
<td>Peer reviewed English Start year 2018</td>
<td>68 results 1 retained</td>
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<tr>
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<td>Database</td>
<td>Search Query</td>
<td>Result Information</td>
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<td>-------------------------</td>
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<td></td>
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<tr>
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<td>((migraine* OR headache* OR &quot;migraine headache**&quot;) AND (cryotherap* OR cold OR ice OR &quot;ice pack&quot; OR cool OR &quot;cool pack&quot; OR &quot;ice therapy&quot;) AND (pain OR analgesi*))</td>
<td>Title/Abstract English Articule type: clinical trial, meta-analysis, randomized controlled trial, review, systematic review 5 years</td>
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<td>Title/Abstract English Articule type: clinical trial, meta-analysis, randomized controlled trial, review, systematic review 5 years</td>
<td>8 results 2 duplicates</td>
</tr>
<tr>
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<td>English 5 years NOT: coronaviruses, infections, covid-19, severe acute respiratory syndrome</td>
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<td></td>
<td>3 results 0 retained</td>
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<td>141 results Search aborted</td>
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<td>CINAHL with Full Text</td>
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<td>Peer reviewed English Start year 2018</td>
<td>68 results 1 retained</td>
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</table>
Appendix B
Prisma Flow Diagram

Records identified:
Through database searching (n = 481)
Through hand searching (n = 6)

Duplicates excluded (n = 12)

Records screened (n = 475)

Records excluded (n = 460)

Full-text articles assessed for eligibility (n = 15)

Full-text articles excluded, with reasons (n = 8)

Quantitative research studies included (n = 5)

Qualitative research studies included (n = 0)

Non-research studies included (n = 2)
## Appendix C
### Individual Summary Tool

<table>
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<tr>
<th>Article Number</th>
<th>Author, Date &amp; Title</th>
<th>Evidence Type</th>
<th>Sample, Sample Size, Setting</th>
<th>Intervention</th>
<th>Findings That Help Answer the EBP Question</th>
<th>Measures Used</th>
<th>Limitations</th>
<th>Strength &amp; Quality Level</th>
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<tr>
<td>1</td>
<td>Hsu, Y. et al. (2022). Cold intervention for relieving migraine symptoms: A systematic review and meta-analysis</td>
<td>Systematic review and meta-analysis</td>
<td>6 studies (4 RCTs and 2 non-RCTs) Total of 224 patients</td>
<td>Cold interventions (cold-gel headbands, cold-gel cap, intraoral cooling, skin temp biofeedback and cold wrap w/ massage vs non-cold regimens)</td>
<td>Cold therapy helps reduce inflammation caused by migraines. This article found that cold therapy has a greater impact short term than long term</td>
<td>VAS</td>
<td>Many of the literature reviewed were rated “high risk of bias” Some literature used was measured as low quality</td>
<td>Level II, High, (A)</td>
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<td>2</td>
<td>Foralosso, H. C., et al. (2019). Cryotherapy in tension headache: Analysis of the frequency of symptoms</td>
<td>RCT</td>
<td>14 women with tension headaches</td>
<td>Cryotherapy (2x a week for 15 minutes for 4 weeks with 1kg of crushed ice in a plastic bag) vs no cryotherapy</td>
<td>Cryotherapy decreased pain intensity and might have been shown to slightly impact pain characteristics</td>
<td>Headache diary measuring pain intensity, moment, characteristics, and associated symptoms</td>
<td>Small sample size, pain intensity only measured as “weak, moderate, or strong”, not specified if all patients took the same medication as well</td>
<td>Level I, Good (B)</td>
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<td>3</td>
<td>Steiner, T. J. et al. (2019). Aids to management of headache disorders in primary care (2nd edition) on behalf of the European Headache Federation and Lifting the Burden: The Global Campaign against Headache</td>
<td>Position statement</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Non-research, minimally addressed PICO</td>
<td>Level IV, Good (B)</td>
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<tr>
<td>4</td>
<td>Diamond, S., &amp; Freitag, F. G. (1986). Cold as an adjunctive therapy for headache</td>
<td>Quasi-experimental research Quantitative</td>
<td>90 patients (30 with migraines, 30 with cluster headaches, 30 with mixed)</td>
<td>Commercial gel pack use in conjunction with abortive and prophylactic migraine medication</td>
<td>71% of patients found the gel pack effective. 80% of migraine patients found it effective. Slight significance that as severity of headache headache severity and pain relief measured on a 0 to 10 scale Questionnaire</td>
<td>N/A</td>
<td>Article did not list limitations. Not specific in population. Inconsistency in pharmacological treatment.</td>
<td>Level II, Good (B)</td>
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<tr>
<td>5</td>
<td>Robbins, L. D. (1989). Cryotherapy for headache</td>
<td>Quasi-experimental research Quantitative</td>
<td>45 patients w/ migraines ages 16 to 54 At least 3 migraine attacks per patient evaluated</td>
<td>CHAMP cold-wrap used for 20-30 minutes at onset of migraine. Usual migraine abortive still used. Cold + pressure around the head with headband</td>
<td>29% found mild effectiveness, 26.6% found moderate effectiveness, 9% found almost complete effectiveness 58% of patients would use the intervention again</td>
<td>Questionnaire: effectiveness of treatment &amp; intention to use again</td>
<td>Small sample size, did not discuss limitations, only evaluated 3 migraine attacks</td>
<td>Level II, Good (B)</td>
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<td>6</td>
<td>Fishman, M. A., et al. (2021). Temperature-mediated nerve blocks in the treatment of pain</td>
<td>Literature review</td>
<td>N/A</td>
<td>Nerve blocks (heat and cold)</td>
<td>Cold provides pain relief and reduction in inflammation and edema. Relatively safe and cost-effective treatment to pain</td>
<td>N/A</td>
<td>Authors have a conflict of interest through stocks, minimally explained which literature showed which results</td>
<td>Level V, Good (B)</td>
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<td>7</td>
<td>Bagherzadi, A., et al. (July 2021). Comparing the effect of heat and cold therapy on the intensity of nitrate-induced migraine type headache in cardiac inpatients: A randomized control trial</td>
<td>RCT</td>
<td>75 cardiac patients (25 control, 25 heat, 25 cold b/t 40 and 70 y.o. Inpatient Iran</td>
<td>Cold vs heat vs no intervention for nitrate induced migraines placed on neck. No other analgesics administered till after 120 minutes of migraine</td>
<td>Statistically significant difference in pain intensity after cold application</td>
<td>0-10 pain intensity scale Chi-square One-way ANOVA Repeated measurement tests</td>
<td>Limited to one hospital, limited population</td>
<td>Level I, High (A)</td>
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</table>

Notes: Use this area to define any abbreviations entered within your table

- **RCT** = randomized control trial
- **w/ =** with
- **VAS** = visual analogue scale
- **b/t =** between
- **N/A =** not applicable
- **y.o. =** year(s) old
## Appendix D

### Articles Appraised by Level of Evidence and Quality

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<th>Quantity</th>
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<tr>
<td>Level IV</td>
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<td>B</td>
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<tr>
<td>Level V</td>
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Fluent in War and Peace
Robert Hoade

College of Arts and Sciences, Department of Political Science and Public Administration

Faculty Mentor: Jeffrey Fortney, Ph.D, Formerly College of Arts and Sciences, Department of Political Science and Public Administration

Abstract

This research is an observation of the life and actions of the Lakota Sioux headman, Red Cloud. A consideration of his life provides the observer with an understanding of the Lakota epoch on the northern Great Plains of North America and his role in the continuation of the Lakota people. As Red Cloud ascended the Lakota meritocracy, he led multiple successful sorties against rival Native groups and the American military. These actions included horse raids and combat missions that enforced Lakota supremacy over the modern Dakotas, Northern Nebraska, eastern Montana, and Wyoming. Later in his life, he and other Plains Natives encountered increasing numbers of Euro-Americans in the form of civilian settlers and traders followed by elements of the Federal Government. As tensions built between the Plains Natives and the US, Red Cloud began to actively oppose American intrusions into Lakota land. The crescendo of Red Cloud’s physical resistance was the Fetterman Fight, an action in which Red Cloud and his allies encircled and destroyed a company-sized element of the US Army. Following its defeat, the US proposed peace through the 1868 Treaty of Fort Laramie. To the US, the agreement concentrated the Lakota in southern South Dakota, away from American economic activities. To men like Red Cloud, unfamiliar with concepts of finite containment, the treaty only affirmed their hunting rights and hegemony in the region. However, as waves of new migrants flowed west from their eastern metropoles, it became apparent to Red Cloud that the policy of the Federal Government was the permanent concentration and degradation of the Lakota. Faced with this forlorn reality, Red Cloud led the Lakota on the reservation through a restricted existence. Despite the Federal attempts at the degradation of the tribe, Red Cloud, using pacifist defiance, ensured the Lakota’s survival and the preservation of a large portion of the region he conquered in his youth. It is possible that his choice to surrender on terms favorable to his tribe and the timing of his cessation of combat actions were more important to the survival of the Lakota than the decision of his peers to continue their war with the US. This is evident in the continuation of the Lakota Pine Ridge Reservation based on the agreement between the US and the Lakota following Red Cloud’s victories in the Powder River Region. Although the Reservation was and is a form of human concentration and containment, it was, a relatively safe place for the Lakota when one considers their treatment outside the sphere of Red Cloud’s influence, most notably the massacre at Wounded Knee.

Near the twilight of the 19th century, the United States government through military force, cultural assimilation, and bureaucratic coercion induced the functional degradation of the Native Tribes of the North American steppe. Among these groups of aborigines were the Siouan-speaking Lakota and Dakota people, self-identifying concepts, meaning, “considered friends”.


leadership of the Oglala band’s headman, Red Cloud, the Lakota were able to for a brief period, slow the unrelenting momentum of American settlers, impede US economic activity, and negotiate with the Federal Government from a position of power. The culmination of Red Cloud’s efforts was the 1868 agreement with the United States that eluded the common practice of removal, acknowledged Lakota hegemony in the northern Great Plains, and created a space and a mood that enabled his culture to absorb and survive the malicious coercion and overt violence dealt to it by the Federal Government. Red Cloud’s military victory followed by his leadership on the reservation illuminates the multiple modes of defiance exercised by Natives in the face of US Federal attempts at the degradation of Indigenous populations throughout North America. Additionally, Red Cloud’s non-combat actions and reservation leadership reveal that the survival of the tribe and the maintenance of an autonomous region is the most observable, enduring form of Lakota resistance. Furthermore, Red Cloud’s clairvoyance regarding the nature and scope of American settler-colonialism and the futility of a prolonged conflict allowed him to capitalize on a decisive victory and capitulate under his terms, ensuring survival, the ultimate defiance of, and victory over the US where others in the region did not.

The space occupied by the Lakota in the mid-19th century was a relatively newly acquired territory. The Lakota, a group known as the Teton Sioux was one of seven linguistically and culturally associated nomadic groups called Tonwan(s), a designation for an autonomous and self-reliant community each internally identified by the regions where they made their long-term winter camps. According to their origin story, the groups were once a single entity alloyed by the membership around one central council fire in their winter camp. Over time, fragments of the main group moved farther away from the center during their summer bounds and made separate winter camps. These derivative bivouacs became permanent, and over time seven distinct groups emerged. From these major divisions, fluid political structures and nomadic lifestyles created further sub-divisions based on the acceptable practice of an entrepreneurial single-family unit camping away from the parent group. This unit could become functionally autonomous as it gathered followers based on the competence of its leaders and the success of their endeavors. It was this flexible social and political mitosis that facilitated the Teton Sioux’s expansion and dominance in the northern plains. One of the largest and most visible of these Sioux offshoots are the Itesica Oglala band of Titonwan or the Bad-Face Oglala Camping on the Plains. Understanding the social-political nature of these clans and their merit-based power structure is key to comprehending the convergence of Native and Euro-American politics on the plains.

Power on the 18th and 19th century Great Plains was exercised by control of natural resources and the use of force in protecting them. For the people living on the grassy expanse, the most coveted natural resources were horses and wild game, particularly bison from which the Lakota sourced an abundance of mailable materials used in almost every aspect of life. The Dakota and their western offshoot, the Teton Lakota, had in the 19th century, rapidly expanded their control over these mammalian resources. For decades as they diffused onto the plains, the Lakota fought with the Kiowa, Crow, Arapaho, Omaha, Pawnee, Shoshone, and Cheyenne for hunting rights in the western Dakotas, Nebraska, and the eastern portions of Montana and Wyoming. The methods of combat and raids used to gain and maintain these rights are thoroughly illuminated in the stories, collated in the autobiography of the Oglala headman, Red Cloud. From a young age, Red Cloud took part in horse raids, bison hunts, and open combat with many non-Sioux tribes on the northern plains. Through these pursuits of the bands’ separate interests, he and other Teton

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6 Walker, Lakota Society, 23–24.
7 Walker, Lakota Society, 15, 19, 20.
Lakota acted informally as the semi-autonomous spearheads of the entire tribe’s North American expansion. Throughout the mid-19th century, Red Cloud gained a reputation as an extremely effective warrior and a competent commander of multiple successful sorties. In a culture of action in which any man, with permission from their tribe’s council, could organize and command a hunting expedition or war party, Red Cloud gathered a multitude of men willing to follow his lead in any of his endeavors. The editor of his autobiography, R. Eli Paul notes that through Red Cloud’s martial prowess, he commanded a following comprised of most of the Teton bands outside of Sitting Bull’s Hunkpapas and Spotted Tail’s Brulés. Instructed by combat experiences, Red Cloud completely reorganized the Lakota order of battle by subdividing his war parties into smaller sub-units. Still, under his overall command, this more flexible structure allowed the Oglalas to react more quickly to the fluid nature of combat. This modification in tactics proved to be highly effective against both Native combatants and the US military. By the time the Lakota encountered substantial elements of the US military and its administrative apparatus, Red Cloud’s Oglalas and the six other bands of their parent Lakota group had already established a core region in the western Dakotas and northern Nebraska and asserted their hunting rights in the Powder River region in eastern Wyoming and Montana. Their migration to, and dominance of the northern plains in the mid-19th century are actions, Finnish historian, Pekka Hamalainen believes are congruent to those of an “imperial power”. Although not an empire by any Eurocentric metric; as they did not set unified policies, impose taxation, or attempt to alter the culture of other natives, they did, through horse theft and violent enforcement of hunting borders force an understanding among other tribes that they were not to trespass in regions inhabited by the Lakota. Just as the Lakota solidified this hold on the region the Euro-Americans in the east began to approach in more significant numbers and in different forms. Previous encounters with eastern Americans had been intimate, and beneficial but limited. Amicable relations with traders and small military detachments made up the bulk of Lakota-American interactions.

Following the discovery of gold in California in the 1840s, the nature of Sioux encounters with Euro-Americans began to change. The prospect of new wealth on the edge of the continent tempted multiple families to organize into large migration parties aimed at Montana, Oregon, and California. These groups, at times, experienced violent interactions with Natives as they moved through their hunting grounds. Post-1854, travelers gave way to permanent residents as the Kansas-Nebraska Act sanctioned US land grabs in the west, inducing massive amounts of Euro-American settlers to move directly into Native lands. Tensions between Natives and settlers grew and to protect the lives of migrants and safeguard gold extraction, the Federal Government began to formulate a policy aimed at dealing with the Plains Natives. This policy was essentially one of concentration and containment, away from Euro-Americans and their economic activities.

Surveillance and fortification came before containment and in Wyoming and Montana, the US began construction on a series of forts following the discovery of gold in Montana in 1862. The Lakota, aware of the Santee Sioux’s conflict with the government in Minnesota and the even closer fight between the Lakota Brulés and troops under Lt. Grattan realized that a war with the US was imminent. Red Cloud resisted the construction of all fortifications on the Bozeman Trail in the Powder River region. In 1866, he began attacking army units under Colonel Henry Carrington as they erected and occupied the forts. The decades of experience in

12 Walker, Lakota Society, 189.
13 Walker, Lakota Society, 56–57
15 Allen, Red Cloud, Autobiography of Red Cloud: War Leader of the Oglalas. 63, 139–140.
17 Hamalainen, “Reconstructing the Great Plains,” 483–484.
long-range reconnaissance and raids against rival tribes enabled Red Cloud to skirmish with the army without ever being pinned down in a symmetrical battle. Subsequently travel to and from the gold fields in western Montana ceased as the army was unable to subdue the Lakota, their Cheyenne, and Arapaho allies. By the winter of 1866, Red Cloud, through martial merit was responsible for directing the Lakota’s fighting forces and “planned all the major movements” in the region. In December of that year, Red Cloud, after months of reconnaissance executed a feint attack on Fort Phil Kearney on the Bozeman Trail. Captain John Fetterman commanding a mix of eighty cavalry and infantrymen sallied from the fort in pursuit of a Lakota decoy force. They chased the small unit of Sioux over a ridge just north of the fort, once over the crest, the US soldiers were met with fire from Red Cloud’s full force, hundreds of Sioux, Arapaho, and Cheyenne. The smaller US pursuit party was quickly killed and as the bulk of Fetterman’s force deployed to aid them, they were encircled and destroyed by the perfectly executed ambush. The annihilation of Captain Fetterman’s company was the largest defeat suffered by the US on the plains. Although Red Cloud’s follow-up attacks ended in stalemates partly due to the army’s newly issued repeating rifles, his major victory was enough to force the United States to abandon its war policy and bring its agents to the negotiating table. Red Cloud’s triumph although impressive was not as substantial as the later Sioux and allied victory at Little Big Horn. However, Red Cloud was able to capitalize on his success and materialize tangible results in the form of the treaty that established the Great Sioux Reservation. Conversely, the Native victory at Little Big Horn, although tactically spectacular did induce favorable diplomatic overtures from the US government.

US diplomats found themselves in an unprecedented situation; for the first time, they were negotiating with Natives from a position of weakness. Red Cloud’s destruction of their forces humbled the US and forced the government to appease the influential Lakota leader. In the spring of 1867, President Grant ordered the theater’s commander, General Sherman to desert the forts on the Bozeman Trail and abandon his military operations against Red Cloud. This placation from the highest authority was a direct appeasement to Red Cloud. The abandonment of the forts was one of Red Cloud’s most direct demands and it had been met by the executive of the republic. His second demand, the right to maintain hunting rights in eastern portions of Wyoming and Montana was also explicitly declared in the treaty signed at Fort Laramie in 1868. This concession to the Lakota was especially important considering the tribe’s nomadic nature and their reliance on wild game to fuel their bodies and economy. From a Euro-American perspective, the government was simply allowing bands of hunters to pursue wild game. However, to Red Cloud, this was a declaration of Lakota hegemony in the region, an affirmation of their control of natural resources, and an edict, formally acknowledging all the land they gained through decades of conquest. In their society hunting rights over large swaths of land meant the exclusion of non-Sioux from that region; essentially, dominance over resources and of one’s neighbors, the closest concept on a European metric of an empire they had.

Unfortunately for the Lakota, the US did practice raw European-style imperialism. To the Federal Government, the treaty establishing the Great Sioux Reservation was a large step in its policy of concentration, containment, and assimilation of Native Americans. Article II of the 1868 Fort Laramie Treaty did confine the Lakota within well-defined borders in modern South Dakota. Although the text does include bans on non-Native travel and settlement in the reservation, the borders themselves were foreign concepts to the nomadic society and a major step in assimilation. Agriculture was another assimilation device employed by the treaty. Multiple articles and clauses provided incentives for Natives to start
farming. 29 These were meant to coerce the Natives into ascribing to the idea of a sedentary life that measured land and time in a myriad of sections and subdivisions. Although meant in some ways as a benevolent gesture, aiding the Lakota on their way to a Western concept of civilization, this shift in lifestyle was neither wanted nor practical. Any group that develops and thrives in a specific ecosystem using specific social, political, and material tools would suffer greatly if those tools were drastically altered or taken away.

Adaptation to alterations of Sioux culture was, unfortunately, a reality of containment. Through his actions and reactions to events, Red Cloud seems to have been aware of the reality of his time and the mood of American imperialism. The fact that the war between the states was over and the Americans could focus the full weight of the country and considerable resources back on the conquest of the west must have been apparent to him. Also, the scenario in which thirty-eight million colonists in the east, could, potentially ford the Mississippi at any time and pour into to the Great Plains was a real fear. 30 To a group of “less than twenty-five thousand” Lakota, these were daunting numbers that threatened their survival. 31 Halting that large of migration through military force was impossible, even for a gifted tactician like Red Cloud. Instead, he had to embrace the flexible, adaptive mindset he used to survive and succeed in war and apply it to peace. Red Cloud was fully acquainted with the reality that the Lakota could use some elements of US policy to their benefit. Health and access to medicine are prime examples of this give and take. Smallpox had destroyed the Native population throughout North America, and the Sioux were not an exception; Western scholars and their own records, their winter counts convey the threat of the virus. 32 Although part of the US assimilation policies, vaccines were offered through the government for those who adhered to some of the social parameters set in The Great Sioux reservation. 33 To a degree, Red Cloud moved his band around South Dakota at the bidding of the government to gain access to life-saving medicine, clothes, and food. 34 This is a prime example of Red Cloud embracing adaption to Euro-American policies to ensure the survival of the Lakota he led. He did, however, have a limit on forced migration. In the fall of 1877, the government mandated that Red Cloud and eight thousand Lakota move east to an inhospitable region of South Dakota. 35 Traveling under the escort of the army, Red Cloud halted migration eighty miles short of the destination and refused to move. After a year of Red Cloud’s defiant inertia, the government broke and watched as he mobilized the camp and settled his people on White Clay Creek; the site of the modern Pine Ridge Reservation, in the southwest corner of South Dakota, near the region he had conquered decades before. 36

Physical movement was not the only tool Red Cloud used to concurrently placate, defy, and survive. He was also in tune with social movements and external conflicts that threatened the well-being of his band. In the case of the Ghost Dance and the broader pan-Native hope and anger that propagated it, Red Cloud chose personal inaction rather than spreading the potential for conflict. As other Teton leaders embraced the transcendent movement that harnessed the disenchantment and justifiable rage of the Lakota, Red Cloud remained neutral. He did however let his son, Jack, join the movement and dance the dance. 37 This is another clear instance of Red Cloud’s flexible, sentient leadership, on one hand, he knew the Ghost Dance and the mood surrounding it was potentially extremely dangerous, and he still allowed his blood relation to join the grassroots, Native movement that was opposed to the very essence of white colonization. His personal neutrality appeased the government as he easily could have stoked the flames of dissent. Conversely, he acknowledged the forlorn mood of some Sioux and did not forbid them, even those closest to him, from embracing the movement of solace and defiant hope.

Finally, non-violent defiance in the face of an immovable force was the mood of the last decades

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29 Treaty of April 29, 1868, Article VI, VIII, X.
31 Larson, “Part II: Red Cloud: The Reservation Years,” 15.
32 Walker, Lakota Society, 141,154.
35 Larson, “Part II: Red Cloud: The Reservation Years,” 19.
36 Larson, “Part II: Red Cloud: The Reservation Years,” 19.
37 Larson, “Part II: Red Cloud: The Reservation Years,” 22.
of a once violent man. Red Cloud, a man who spent half of his life in a constant state of war, died peacefully in old age in 1909. His life so richly lived can be used as a lens from which one can observe nearly the entire Lakota epoch on the Great Plains. He ascended the meritocracy of the Sioux society as they fought for dominance over the northern steppe. He commanded near-unparalleled respect as he marshaled war parties that maintained peak Lakota power. And finally, Red Cloud recognized the forlorn reality that American imperialism had in store for the Natives and acted accordingly in the sole interest of his people. He won a brilliant and decisive victory in Wyoming and then capitalized on his undeniable but brief advantage over the US. From his position of power, he was able to negotiate and agree on terms he believed would provide the best future for the Lakota. Once confined on the reservation, he balanced the demands of the Lakota and the US government. His role as a warrior was matched equally with his duties as a peacekeeper and mediator. This final aspect of his leadership, the clairvoyance to see the right time to cease combat actions and accept a somewhat favorable outcome of reservation existence, concentration instead of annihilation. The evidence for this statement is the continuation of the Lakota culture on the Pine Ridge Reservation, a region set aside for the Sioux following Red Cloud’s victory over Fetterman and the subsequent 1868 treaty. Those bands confined to the large region were in many senses of the term, prisoners. However, those Lakota who lived outside its boundaries were treated even more harshly. This is apparent when the massacre at Wounded Knee Creek is considered as what it was, a retaliatory extermination attempt designed to punish those who hazarded to be armed and dwell outside the reservation. Additionally, it was possible for the US Army to engage their victims as hostiles because they were not protected by the camp established by Red Cloud. A powerful testament to this and Red Cloud’s reservation-era-leadership is hauntingly conveyed through a Sioux eyewitness of the Wounded Knee Massacre. He noted that during the tension between the Sioux and US army, the band’s leader, Big Foot expressed a wish, that the army allow him and his party to “get to Red Cloud’s camp before I die”.

This was a man allegedly participating in the Ghost Dance and instigating an open, armed movement in defiance of the government. In reality, Big Foot was a man trying desperately only to establish a meeting within the safety of Red Cloud’s influence; to mediate further conflict as he was sure that the Oglala leader could help him avoid future bloodshed and the tragedy at Wounded Knee Creek.

Bibliography

Primary


Secondary


38 Walker, Lakota Society, 156.


An Evidence-based Practice Project to Improve Sleep for Individuals with Autism

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Introduction

According to the Centers for Disease Control and Prevention Autism and Developmental Disabilities Monitoring (2023), autism spectrum disorder (ASD) is diagnosed in approximately 1 in 36 children. Common signs of ASD are difficulties with social interaction and communication, repetitive behaviors, delayed cognitive skills, and unusual sleep habits (Centers for Disease Control and Prevention, 2023). Sleep disorders are present in 80% of autistic children and 50% of autistic adults (Lane et al., 2022). Common sleep issues reported are prolonged sleep latency, reduced duration of sleep, and waking during sleep (Lane et al., 2022). These common sleep issues have been associated with an increase in physical aggression, inattention, oppositional behavior, tantrums, self-injury, and mood variability in the ASD population (Seo, 2021). Weighted devices such as weighted blankets, compression t-shirts, and garments are becoming a popular discussion for improving sleep for individuals with ASD. In theory, weighted devices such as weighted blankets create a deep pressure sensation that decreases one’s physiologic level of stress and arousal, potentially improving sleep quality (Bolic Baric et al., 2021). Despite the increasing popularity of weighted devices, it remains unclear how effective these weighted devices are in reducing sleep disturbances for individuals with ASD.

In the nursing profession, nurses are responsible for practicing and educating all individuals on the most therapeutic interventions for promoting sleep. Nevertheless, individuals with ASD may require more assistance and nonpharmacological interventions to improve sleep quality. The purpose of this evidence-based practice (EBP) project was to determine the effectiveness of weighted devices and garments in reducing sleep disturbance among individuals with ASD.

PICO Question

In this EBP project, the PICO question format was used in which (P) stands for population, (I) for intervention, (C) for comparison, and (O) for outcome. In individuals with autism (P), how does using weighted devices (I) compare to not using weighted devices (C) on sleep disturbances (O)?

Methodology

Search Strategy

To address the PICO question, a literature search was conducted to find the best practice for reducing sleep disturbance for individuals with autism. The search was conducted on the following databases: PubMed, Nursing & Allied Health Database (ProQuest), Cumulative Index to Nursing and Allied Health Literature (CINHAL), and Cochrane (Reviews). The following keywords were used when searching across the databases: autism, ASD, neurodivergent, weight(ed) vest(s), weighted(ed) blanket(s), weight(ed) clothing(s), weight(ed) garment(s), weight(ed) device(s), deep pressure therapy, sleep, insomnia, sleep quality, sleep disturbance(s), and sleep duration. Only peer-reviewed articles were accepted, in the English language, and published between January 2018 to June 2023. Articles were screened to ensure that the population was individuals with autism and the intervention used was weighted devices.

At the start of the literature search, 134 articles were identified as follows: 127 articles obtained from databases and seven articles obtained from hand searching. Of the 134 articles screened, the full text of thirteen articles were reviewed and retained. Three of these articles were excluded due to a lack of availability or conference meetings with no access to the full text. The ten remaining articles were evaluated for applicability to the PICO question.
Of the ten articles, three articles were excluded due to irrelevance in answering the PICO question. In Appendix B, the Prisma Flow Diagram is available to illustrate the review process.

**Review of Literature**

The seven remaining articles were examined using the Johns Hopkins Evidence-based Practice Model Appraisal tools, assigning each article a grade of either A, B, or C for quality. The rating A means high quality, B means good quality, and C means low quality. In Appendix C, the Individual Evidence Summary tool has a brief summary of all the articles and the quality ratings. In Appendix D, the table includes the number of articles related to the level of evidence as well as the quality rating of the articles.

Of the seven articles, two articles were quasi-experimental studies (Level II, B quality) exploring the effectiveness of weighted devices for children with ASD (Gee et al, 2020; Mische Lawson et al, 2022). The weighted devices used in these studies were SensaCalm® brand weighted blankets that were 10% of the participant’s body weight and SmartKnitKids Compresso-T shirt®. These studies used self-reported measures such as the Children’s Sleep Habits Questionnaire (CHSQ), caregiver surveys, and diaries. Mische Lawson et al. (2022) used the Garmin Forerunner 735XT or 935 watch App as a direct measure of sleep quality. While Gee et al. (2020) used Sense Sleep App to directly measure total sleep time, number of hours of deep sleep, and overall sleep quality, both of these studies showed that weighted devices did not significantly improve sleep quality when measured using a device (direct measurement); however, based on the CHSQ and caregiver reports, approximately one-third of participants in these studies found that sleep latency, time it takes to fall asleep, improved when using weighted devices at bedtime.

A supporting retrospective follow-up study (Level III, B quality) was identified, highlighting the benefits of weighted devices for children and adults with ASD. The weighted devices used in this study were one of two types of weighted blankets: chain-weighted blankets or ball-weighted blankets. Interviews were conducted on self-reported measures of sleep quality. Based on the telephone interviews, children reported significantly higher (68.8% vs. 45.7%) improvement in the ability to fall asleep when using the weighted blanket (p < 0.05) (Bolic Baric et al., 2021). Additionally, of the total participants, 81% reported that the weighted blanket did improve sleeping through the night. Compared to the quasi-experimental studies, this follow-up study supports the use of weighted devices for not only children but also adults with ASD.

A practice guideline by the American Academy of Neurology of Neurology (Level IV, A quality) further explored the efficacy of weighed devices for children and adolescents 18 years old and younger. The weighted devices that were focused on in this practice guideline were weighted blankets. A common direct measure of sleep quality that was used was actigraphy to measure total time of sleep, sleep onset latency, and wake after sleep onset. Sleep diaries were used as a self-reported measure of sleep quality. They found inconsistent evidence to support the routine use of weighted blankets; however, recommendations for use should be made based on the individual's preferences for the approach (Buckley et al., 2020). In summary, the use of weighted devices can be considered on the individual's preference.

Additionally, three of the seven articles were reviews (Level V, B quality) that evaluated the effectiveness of weighted blankets for sleep quality. Of the three Level V reviews, two were literature reviews and one a scoping review. When evaluating weighted blankets using direct measures of sleep quality, the three articles concluded that there was no significant evidence to support that weighted blankets improved sleep compared to the control groups (Lane et al, 2022; Seo, 2020; Burman et al, 2023). However, Burman et al. (2023) identified that the self-reported measures of sleep quality, such as parent-reported sleep diaries, suggested that children and parents preferred to use the weighted blanket at night. In brief, the self-reported measures of sleep quality in these three literature reviews align with the findings from the practice guideline in which the use of weighted blankets may be based on the individual’s preferences.

The most common weighted devices used across the articles were weighted blankets such as chain-weighted blankets or ball-weighted blankets, and compression garments such as Compresso-T
In all articles, the weighted devices were used during the nighttime starting when the participant was in bed ready to fall asleep, and ending when the participant woke up in the morning. When comparing the amount of time using weighted devices in each article, the intervention time frame ranged from 12 days to 10 months. Both quasi-experimental studies included baseline phases before the intervention and withdrawal phases after the intervention (Gee et al., 2020; Mische Lawson et al., 2022). Although the intervention phases ranged in number of days, the types of weighted devices used were relatively consistent throughout the articles.

Based on the literature search, weighted devices may aid in improving sleep quality; however, there were inconsistencies in the how sleep quality was measured in the studies (self-reported versus direct measurement). Numerous studies mentioned the difficulties of enforcing wearable technology because of participants’ sensory issues related to ASD (Gee et al., 2020; Mische Lawson et al., 2022). Despite these inconsistencies, there was consistent self-reported improvement of sleep quality across the literature. In total, three articles had direct measures of sleep quality, and four articles had self-reported measures of sleep quality supporting the benefits of weighted devices for individuals with ASD. A synthesis of evidence has revealed that weighted devices may be beneficial based on individuals’ preferences. Hospitals and health care organizations should consider implementing weighted devices to improve sleep quality among individuals with ASD.

Conclusion

A comprehensive review of the literature was conducted to form a recommendation based on the following PICO question: In individuals with autism (P), how does using weighted devices (I) compare to not using weighted devices (C) on sleep disturbance (O)? During the review process, a total of seven articles were evaluated based on level and quality as well as relevance to the PICO question. Considering all findings from the seven articles, there is good but inconsistent evidence supporting the effectiveness of weighted devices; however, there was sufficient evidence in support that weighted devices may be beneficial when taking into consideration the individuals’ preferences. Based on an assessment of fit and feasibility, it was determined that hospitals should consider weighted devices in medical settings as a non-pharmacological option to improve sleep quality for individuals with ASD.

References


Centers for Disease Control and Prevention. (2022,


## Appendix A: Search Strategy Table

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<th>Date</th>
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<td>Nursing &amp; Allied Health Database</td>
<td>(Autis* OR ASD) AND (“weight* vest*” OR “weight* blanket*” OR “weight* garment*”) AND (Sleep OR insomnia OR “sleep quality” OR “sleep disturbance” OR “sleep duration”)</td>
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Table continued...
Appendix B: PRISMA Flow Diagram

Identification

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Through database searching (n=127)
Through hand searching (n=7)

Duplicates excluded
(n=8)

Screening

Records screened
(n=13)

Records excluded
(n=3)

Eligibility

Full-text articles assessed for eligibility
(n=10)

Full-text articles excluded, with reasons
(n=3)

Included

Quantitative research studies included
(n=4)

Qualitative research studies included
(n=0)

Non-research studies included
(n=3)
## Appendix C: Individual Summary Tool

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<th>Measures Used</th>
<th>Limitations</th>
<th>Strength &amp; Quality Level</th>
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<td>Bolic Baric et al., (2021) The effectiveness of weighted blankets on sleep and everyday activities – a retrospective follow-up study of children and adults with attention deficit hyperactivity disorder and/or autism spectrum disorder</td>
<td>Non-experimental</td>
<td>85 Individuals (48 children and 37 adults) with ADHD and/or ASD who were prescribed to use a weighted blanket.</td>
<td>-The use of weighted blankets at night and during the day based on what the individual prefers. -Types of weighted blankets used were either a chain-weighted blanket or ball-weighted blanket.</td>
<td>There was a positive association between weighted blankets and participants' time falling asleep, and sleep duration.</td>
<td>The team developed questions based on the International Classification of Functioning, Disability, and Health (ICF) domains.</td>
<td>-Subjective reports were used for data collection -Parents reported for children, parents aren't able to see full night routine and may be biased</td>
<td>Level III, Good Quality (B)</td>
</tr>
<tr>
<td>2</td>
<td>Gee et al., (2020) Weight blankets and sleep quality in children with autism spectrum disorder: A single-subject design</td>
<td>Quasi-experimental Study</td>
<td>Two 4-year-old participants were diagnosed with autism spectrum disorder who experienced sleep disturbances.</td>
<td>-Participants used SensaCalm &amp; Brand weighted blankets -The first phase was 7 days long with no intervention. The second phase was 14 days long where participants used a weighted blanket to sleep at night. The third phase was 8 days long and participants did not use the weighted blanket.</td>
<td>-One participant had an improvement in sleep latency during the intervention phase. -Between the two participants, the weighted blanket had little influence on improving sleep disturbances.</td>
<td>-Sense Sleep App used as an objective measure to track sleep quality -Non-standardized Daily Caregiver Survey used as a subjective measure</td>
<td>-Small sample size obtained using convenience sampling method therefore results are not generalizable -Caregivers may be biased when filling out Daily Caregiver Survey -No reliability or validity test on Hello Sense Sleep App before using it in the study</td>
<td>Level II, Good Quality (B)</td>
</tr>
<tr>
<td>3</td>
<td>Lane et al., (2022) Sleep, sensory integration/processing, and autism: A scoping review</td>
<td>Scoping Review</td>
<td>A total of 24 articles, 17 articles exploring the relationship between sleep concerns and sensory integration differences, and 7 articles about interventions used for sleep disturbances.</td>
<td>-Weighted blankets compared to other interventions -Weighted blankets were used for 12-16 days during the intervention phases</td>
<td>There were very few intervention studies that explored or supported the use of weighted blankets or other interventions to improve sleep quality.</td>
<td>-Most commonly used was the Children's Sleep Habits Questionnaire (CSHQ) -Sensory Profile (SP) or Short Sensory Profile (SSP)</td>
<td>-Intervention studies involved a small sample group and had no comparison group. -Some studies used need to be replicated to ensure findings. -There was a wide variety of assessment tools used across the studies.</td>
<td>Level V, Good Quality (B)</td>
</tr>
<tr>
<td>4</td>
<td>Mische Lawson et al., (2022) Effort of Sensory Garments on Sleep of Children with Autism Spectrum Disorder</td>
<td>Quasi-experimental study</td>
<td>4 children ages 4-10 years old's who have ASD, had difficulties sleeping and lived in the Kansas City area.</td>
<td>4 phases: -A1 was the baseline phase without any intervention for one week -B2 was 1&quot;</td>
<td>-One participant showed improvement in sleep latency. -Evidence is limited to supporting deep-pressure compression devices</td>
<td>-Garmin Forerunner 735XT or 935 watch -Parent-reported sleep logs -Parenting Stress</td>
<td>-Some participants had difficulties wearing the Garmin watch. -Natural life events could</td>
<td>Level II, Good Quality (B)</td>
</tr>
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<td>5</td>
<td>Seo, (2021)</td>
<td>Literature Review</td>
<td>N/A</td>
<td>Intervention phase, participants wore SmartKnitKids Compresso-T garments for three weeks. A2 was the baseline phase again, participants did not use any interventions. B2 was the 2nd intervention phase, participants wore Compresso-T garments for two weeks.</td>
<td>To improve sleep quality.</td>
<td>Index Short Form: Children's Sleep Habits Questionnaire (CSHQ) - Measuring sleep latency, duration, and total time sleeping.</td>
<td>Have impacted the results on participants' sleep quality.</td>
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| 6 | Burman et al., (2023) | Literature Review | N/A | The use of weighted blankets for children and adolescents compared to other interventions. 10-month RCT with two groups: weighted blanket group and control blanket group. | There is no significant evidence to support that the weighted blanket group improved sleep quality compared to the control blanket group. | Common measures used were the CSHQ - Used to measure sleep characteristics and disturbances. | The article did not mention methods used or limitations. | Level V, Good Quality (B) |

| 7 | Buckley et al., (2020) | Practice Guideline | All trials involved participants in the United States and Europe who were 18 years old or younger. | The efficacy of weighted blankets compared to other interventions on prolonged sleep latency, total sleep time, and sleep continuity. | Objective parameters showed no difference between intervention and control groups. Subjective parameters showed that children and parents preferred the use of the weighted blanket. | Objective methods and subjective methods such as actigraphy, parent-reported sleep diaries. | Various trials had a lack of objective sleep measures. | Level V, Good Quality (B) |

**Notes:** Use this area to define any abbreviations entered within your table.
- ADHD – attention deficit hyperactivity disorder
- ASD – autism spectrum disorder
- ICF – International Classification of Functioning
- CSHQ – Children’s Sleep Habit Questionnaire
- SP – Sensory Profile
- SSP – Short Sensory Profile
- RCT – Randomized Control Trial
- TST – Total Sleep Time
- WASO – Wake After Sleep Onset
- SOL – Sleep Onset Latency
Appendix D

Articles Appraised by Level of Evidence and Quality

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<thead>
<tr>
<th>Level</th>
<th>Quantity</th>
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<td>Level V</td>
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Hungarian and Polish Democratic Backsliding: Two Stories with the Same Ending

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Abstract

In recent years countries such as Hungary and Poland in Europe, as well as India and Brazil in the global south, have featured in the news as examples of democratic backsliding. Hungary and Poland have shared histories as post-Warsaw Pact countries- they share many characteristics and are both parliamentary democracies- and members of the EU- and yet they have experienced different rates of democratic backsliding. What are the similarities and differences between Poland and Hungary- and how have they resulted in different rates of democratic backsliding? I will analyze how both countries are similar before testing six theories of democratic backsliding-as presented by Waldner and Lust (2018)- for both countries, including (1) agency-based theories, (2) political cultures theories, (3) political institutions theories, (4) political economy theories, (5) social structure and political coalitions theories, and (6) international factors theories, before I compare their differences and distinguish what set them apart.

Introduction

Samuel Huntington (1991) described how a third wave of democratization occurred as 30 countries shifted to democratic governance between 1974 and 1991—and he describes how each wave of democratization is followed by a reverse wave of democratization. With recent examples of democratic backsliding, such as Hungary, and Poland experiencing democratic backsliding, many scholars across the globe have speculated whether the world is currently in a third reverse wave of democratization as described by Huntington (1991). Democratic backsliding in this paper will be defined in Haggard and Kaufman’s terms (2021) as the incremental erosion of rules, norms, and institutions that result from a duly elected government (27).

Hungary and Poland stand out as notable examples worth examining as they possess many similarities: Both countries are parliamentary democracies, both are post-Eastern Bloc states, both are members of the EU, and both were considered thriving liberal democracies (Abramowitz and Puddington, 2020).

Freedom House’s Nations in Transit methodology categorizes governments as consolidated authoritarian regimes (0-17), semi-consolidated authoritarian regimes (18-33), transitional or hybrid regimes (34-50), semi-consolidated democracies (51-67), and consolidated democracies (68-100) (Freedom House, 2023). Hungary is labeled as a transitional or hybrid regime (scoring 43), and Poland is considered a semi-consolidated democracy (59). Both countries are experiencing democratic backsliding, but what are the differences between Hungary and Poland that have resulted in these different rates of democratic backsliding? This paper seeks to understand the difference between Hungary and Poland’s democratic backsliding by testing six democratic backsliding theories of presented by Waldner and Lust (2018): (1) agency-based theories, (2) political culture theories, (3) political institutions theories, (4) political economy theories, (5) social structure and political coalition theories, and (6) international factors theories. This paper begins with democratic backsliding backgrounds in Hungary and then Poland before presenting each theory in order and applying it to both countries with an analysis of how they differ regarding each respective theory.
Finally, this paper will conclude with an analysis of how the countries are different, and which theories of democratic backsliding hold more weight for each country respectively.

Hungary’s Democratic Backsliding Background

In 2010, the center-right Fidesz party won 53% of the vote in the national parliamentary elections—resulting in the Fidesz party winning 68% (a two-thirds supermajority) of the seats in the 386-seat National Assembly (Bánkuti et al., 2012, 138-139). This disproportionate translation of votes for seats in the Hungarian National Assembly resulted from constitutional flaws, giving preference to majority parties out of fears of the original constitutional drafters that a fractured parliament with parties unable to form stable coalitions would result (Bánkuti et al., 2012, 138).

Poland has experienced less extensive democratic backsliding in the sense that it has kept the same constitution, and its leading party, the Law and Justice Party (PiS), has not consolidated its power as firmly as the Fidesz party in Hungary, and this in part is because it has not been able to gain a supermajority in the same way as the Fidesz. Below, I will explain some of the most significant democratic backsliding developments in Poland since 2015.

The Fidesz party moved to restrict the Hungarian Constitutional Court’s jurisdiction, first removing the Court’s jurisdiction over fiscal statutes (after the Court struck down a 98% retroactive tax on the departing bonuses of anyone who left public office) (Bánkuti et al., 2012, 139). The Fidesz party also amended the old constitution before it was replaced to allow the leading party to nominate new judges and a two-thirds majority to vote them into the Constitutional and added seats to the Constitutional Court, allowing the party to nominate and elect seven new justices to the Court (Bankuti et al., 2012, 139-140).

The Fidesz supermajority passed the Fourth Amendment, nullifying the Constitutional Court’s case law between 1990 and 2011 (Kovács and Scheppele, 2019, 64). The Fidesz party also went after the ordinary courts by passing Act CLXII/2011 on the Status and Remuneration of Judges, which lowered the compulsory retirement ages of judges from 70 years to anywhere from 63-65 years based on when the judges were born—forcing around 10-15% of all judges in Hungary to retire (Kovács and Scheppele, 2019, 64). All of these revisions were included in the Fundamental Law (Bankuti et al., 2012, 140).

In 2010, the Fidesz party passed the “Media Law,” which centralized all state news under the control of a new politically appointed Media Council (Musgrave, 2021, 12). The Council purged Hungarian state-owned media staff—unite the state-owned media behind the Fidesz—while simultaneously requiring state-owned media to use the information provided by the Media Council (Kornai, 2015, 40). Private media organizations were also controlled by the Fidesz party through new ad hoc regulations (Musgrave, 2021, 12). For example, private news companies could source their information for free from state media but would have to pay high fees for alternative information (Kornai, 2015, 40).

The Fidesz party has maintained its supermajority through a process of electoral reforms favoring the party. Critically, the Fundamental Law of 2011 reduced the number of seats in parliament from 386 to 199, with 106 to be voted for in individual constituencies and 93 through proportional party list votes (Bankuti et al., 2012, 43). The Fidesz-led parliament also passed CCIII/2011, a cardinal law, to gerrymander Hungary’s voting districts—varying in size and population (Scheppele, 2022, 52). Viktor Orbán played an essential role in the electoral reforms by eliminating run-off elections, so that elections could be decided by a plurality of the vote instead of a majority (Scheppele, 2022, 53-54). Additionally, financial incentives were offered to create new “fake parties” to split votes, while party coalitions were given higher hurdles to enter parliament, with a single needing 5%, two needing 10%, and three or more needing 15% (Scheppele, 2022, 53-54).

As the 2022 election was approaching, Viktor Orbán instituted reforms to prevent the opposition from unifying, and he did this through a law that passed via the National Assembly that allowed for voter tourism, allowing voters to register anywhere in the country (regardless of where they live) (Scheppele, 2022, 55). Additionally, in 2014, Viktor Orbán passed a set of laws that allowed near-abroad voting, allowing ethnic non-citizen Hungarians in
neighboring countries to vote in Hungarian elections (they are also primarily supportive of the Fidesz party) (Scheppele, 2022, 55-56).

Hungary’s democratic backsliding appears to result from critical institutional flaws that allowed the Fidesz party to win a supermajority and permanently remove checks on its power. Of course, the purpose of this paper is to test other theories of democratic backsliding and to compare Hungary to Poland through these theories.

Poland Democratic Backsliding Background

Poland has experienced less extensive democratic backsliding in the sense that it has kept the same constitution, and its leading party, the Law and Justice Party (PiS), has not consolidated its power as firmly as the Fidesz party in Hungary, and this in part is because it has not been able to gain a supermajority in the same way as the Fidesz. Below, I will explain some of the most significant democratic backsliding developments in Poland since 2015.

Poland is a semi-presidential system with a bicameral legislature, including the Sejm (the lower house, with 460 proportionally elected seats) and the Senate (the upper house, with 100 seats), with members of both elected for four-year terms (Freedom House, 2022). The president, Andrzej Duda (who won his second and last five-year presidential term in 2020), appointed the current prime minister Mateusz Morawiecki in 2017 (Freedom House, 2022).

In 2015, Andrzej Duda of the PiS party won the presidency in the run-off election, and the PiS won 235 seats out of the 460 (approximately 37% of the vote)- allowing the PiS to form a one-party government and avoid forming a coalition government with other parties, such as the Civic Platform (PO) party (Markowski, 2016, 1311-1314).

The most drastic reform implemented by the PiS involved the Constitutional Tribunal (Poland’s judicial review court). As the 2015 election approached, the PO attempted to pack the Constitutional Tribunal—changing the law that designated the Parliament in power on the day a judge’s term ended—to allow the PiS to form a one-party government and avoid forming a coalition government with other parties, such as the Civic Platform (PO) party (Markowski, 2016, 1311-1314).

The Constitutional Tribunal blocked the five PiS-elected judges from joining the Tribunal throughout 2016, and the PiS-controlled Parliament passed at least six laws regulating the court’s powers and procedures—including a restriction that made it so that a supermajority (two-thirds) vote would be needed to nullify a law (Kovacs and Schepppele, 2019, 73). Additionally, the PiS passed a law that allowed three judges to vote to have a case heard en banc (with all judges seeing the trial), meaning that no cases that PiS judges were avoiding could be decided (Kovacs and Schepppele, 2019, 73-74). The PiS passed a law that required the Prosecutor General to attend to any case with a full bench (Kovacs and Schepppele, 2019, 74).

This legal battle with the Constitutional Tribunal ended in December 2016 when Andrzej Rzeplinski, the Constitutional Tribunal president, reached the end of his term. Julia Przylebska became the Constitutional Tribunal’s interim president (by a PiS statute) in violation of the rules that designated the vice-president of the court to attend to the selection of a new president (Kovacs and Schepppele, 2019, 75). Julia Przylebska was called for election (which she presided over) and was then elected as president of the Constitutional Tribunal. Julia Przylebska then granted the three illegally elected PiS judges their judgeship to vote for her and created vacant seats using legitimacy challenges for three other judges (Kovacs and Schepppele, 2019, 76).

The PiS moved to control the media, and on December 30, 2015, the PiS parliament passed the Broadcasting Act Amendment—nullifying provisions that granted the Polish media authority the power to appoint members of supervisory boards and public
media boards—shifting authority to the Treasury Ministry (Guzek and Grzesiok-Horosz, 2021, 1248). The PiS passed the Amendment Act to shorten office terms of members of supervisory and management boards of public media (Guzek and Grzesiok-Horosz, 2021, 1248). This meant the PiS was able to decide who would work in the media and how long their terms would last (Guzek and Grzesiok-Horosz, 2021, 1249).

While Poland has experienced democratic backsliding due to the PiS’s actions regarding the Constitutional Tribunal and the media, it was not as extensive as Hungary’s backsliding. Thus, the point of this paper is to test exactly why this difference exists.

Testing Theories of Democratic Backsliding: Hungary & Poland

This paper will examine Hungary and Poland, testing six theories of democratic backsliding provided by Waldner and Lust (2018), including (1) agency-based theories, (2) political institutions theories, (3) political culture theories, (4) political economy theories, (5) social structure and political coalition theories, and (6) international factors theories (97-106). The goal is to understand why Hungary and Poland have experienced different extents of democratic backsliding. For each theory, this paper will start by analyzing Hungary and then Poland. After each theory is tested, I will conclude with a section discussing which theories are more applicable to each country and their significant differences.

Agency Based Theories

Agency-based theories of democratic backsliding explain how decisions made by significant political actors—under generally unconstrained conditions—initiate the process of democratic backsliding (Waldner and Lust, 2018, 97). The decisions may result from personal attributes, including intellect or temperament, or they can result from strategic decision-making on the part of the agent (Waldner and List, 2018, 97).

Hungary

Viktor Orbán was instrumental in passing laws favoring the Fidesz party, such as voter regulations allowing for voter tourism and near-abroad voting, as well as eliminating runoff elections. Critically, Viktor Orbán used his premiership to reshape Hungary’s Foreign Affairs Ministry (MFA)—at first opting to retain the experienced diplomats in the ministry until 2014, when he decided to change the leadership (Viznovitz and Jenne, 2021, 689-690). Viktor Orbán would appoint Peter Szijjarto as the Minster of the Ministry of Foreign Affairs, a close ally of Viktor (Viznovitz and Jenne, 2021, 690). Szijjarto took the MFA in a new diplomatic direction, restructuring the MFA’s institutions for the Fidesz party (Viznovitz and Jenne, 2021, 690). This new diplomatic direction would center around Hungarian national prosperity and reject international financial institutions run by technocrats (Viznovitz and Jenne, 2021, 691-692).

Viktor Orbán has carefully led his party’s continuous supermajority to pass laws and rewrite the constitution to consolidate the Fidesz party’s control over the National Assembly and the Constitutional Court. Additionally, Viktor Orbán used a larger pattern to populate ministries with his allies, so that they are cooperative with Fidesz laws and regulations, creating a key base of support for the Fidesz-led government.

In this sense, Viktor Orbán used strategic decision-making to consolidate the Fidesz party’s power.

Poland

In Poland, it is harder to attribute democratic backsliding to a specific person like Viktor Orbán in Hungary. Poland has a president (Andrzej Duda since 2015), Prime Minister (Mateusz Morawiecki since 2017), and PiS chairman (Jarosław Kaczyński since 2003). Most notable is Jarosław Kaczyński, who after 2015, controlled the direction of the PiS from behind the scenes (Przybylski, 2018, 57). Kaczyński had Beata Szydło take the premiership as a proxy as she was popular and had a clean political record (Przybylski, 2018, 57). Szydło ruled, bound to a contract with Kaczyński, with terms of dismissal if she proved too popular or unpopular with the electorate (Przybylski, 2018, 57). Of course, Szydło stepped down in 2017 to make room for Mateusz Morawiecki, who would restore PiS-led Poland’s relationship with the EU (Przybylski, 2018, 58).

Kaczyński has maintained firm control over
PiS MPs, allowing for the passage of laws he supports and preventing debate or public review—by using the PiS’s efficient legislative approach and violating parliamentary norms and rules (Przybylski, 2018, 58). Critically, the PiS party leader has significant strength in the organization, being a part of the three PiS party bodies, including the PiS Congress (which he can convene), the Political Council (which he leads), and the Political Committee (which he leads) (Hartliński, 2019, 98). Kaczyński has the authority to make party nomination choices for key party roles, such as for the party treasurer, vice-president, secretary of the Political Council, chairman of the Executive Committee, secretary of the Political Committee, and the party spokesperson (Hartliński, 2019, 98-99). Jarosław Kaczyński controlled the PiS from behind the scenes, only really assuming the role of Deputy Prime Minister between 2020 and 2022, returning to the office on June 21, 2023 (Gera, 2023).

President Duda refused to swear in all five of the Civic Platform elected judges, despite only two technically being illegal, and he refused to publish the decision of the Constitutional Tribunal, which found the election of three of the five PiS replacement judges illegal (Kovacs and Scheppele, 2019, 72-76).

**Political Institutions Theories**

Political institutions theories analyze how political institutions such as a country’s legislature, judiciary, and elections offices affect the process of democratic backsliding (Waldner and Lust, 2018, 99).

**Hungary**

In Hungary, some notable institutional flaws allowed the country to experience more extreme democratic backsliding. The original Hungarian Constitution gave preference to majority parties, giving them a larger portion of seats in the National Assembly and allowing the Fidesz Party to win a supermajority with 68% of seats (Bánkuti et al., 2012, 138-139). Considering this feat and that Hungary has a unicameral legislature, it is clear why the Fidesz party was able to dominate all lawmaking in the country without an initial check from another legislative chamber. This legislative aspect also explains the efficiency of the Fidesz party in making drastic changes within its first years in power. Additionally, the original Hungarian Constitution provided few protections from a two-thirds majority, failing to restrict a supermajority from drafting an entirely new constitution and failing to protect the independence of the constitutional court. Hungary’s original governmental design was meant to be efficient as it was unicameral and favored whichever party was in the majority, but it made the legislature too powerful in comparison to the judiciary that was supposed to check the National Assembly.

**Poland**

The PiS never won a supermajority in Poland’s bicameral legislature, meaning that all of the power is not concentrated in one legislative body. In Poland, institutions remain the same on paper, but they are substantively different (Sadurski, 2020, 63). Sadurski (2020) provides the example that parliamentary procedures have remained the same, yet the PiS uses a scheme in which private members introduce bills to a parliamentary legislative committee (which the PiS holds an absolute majority-limiting debate to 1-2 minutes) (63). The PiS uses loopholes to pass its laws—doing so without formally changing laws (Sadurski, 2020, 63).

The PiS has made the Constitutional Tribunal an instrument of its government by packing the court with five PiS judges, three of those seats were supposed to go to judges that the Civic Platform Party elected (Kovacs and Scheppele, 2019, 76). This majority on the Constitutional Tribunal then legitimated a 2011 law regulating the National Judicial Council and setting rules for selecting the president of the Constitutional Tribunal (Kovacs and Scheppele, 2019, 76). The PiS government also passed a law allowing the Justice Minister to fire any Polish Court president within six months of the law’s passage for any reason and lowering the court retirement age from 67 to 60 years for women and 65 years for men (Kovacs and Scheppele, 2019, 77). The most important check on the PiS government—the Constitutional Tribunal—lost its independence, but it maintained it on paper, affirming illiberal laws that PiS passed to control other institutions legally.

**Political Culture Theories**

Theories of political culture, as described by Waldner and Lust (2018), explain how beliefs, attitudes, norms, practices, and rituals have an
emotional power with people can explain democratic backsliding (98).

Hungary

The Fidesz Party has espoused illiberal values, prioritizing traditional family and conservative Christian values over the liberal values of multiculturalism, gender equality, and environmentalism (Scoggins, 2022, 7). Fidesz voters (to varying extents) are more religious and have moral values embraced in the country’s Christianity. Additionally, the Fidesz weaponized the arrival of immigrants—particularly from the global south to stoke fears in the public to improve their legitimacy—even though Visegrad states like Hungary receive many Ukrainian immigrants yearly, and they are never labeled as a threat (Vachudova, 2020, 322). Orbán uses fears of immigration to delegitimize international and domestic opponents as supportive of Muslim immigrants over Hungarians, expecting to change the national dialogue, gain public support, and villainize liberal institutions (Vachudova, 2020, 322-323).

Poland

In Poland, leading up to the 2015 election, the PiS party softened its originally hardline image—urging a conservatism of compassion, garnering the support of prominent LGBTQ+ rights activists (Fomina and Kucharczyk, 2016, 61). The PiS party carefully balanced winning new voters and maintaining its hardline support—appealing to the conservative and Catholic segment of Poland’s population (Fomina and Kucharczyk, 2016, 61). In 2015, Poland’s Catholic Church was instrumental in maintaining core support for the PiS, avoiding the open campaigning that cost the PiS the 2010 presidential election (Fomina and Kucharczyk, 2016, 61). The refugee crisis in 2015 helped the PiS gain support due to public fears and Kaczyński’s position on refugees and immigrants generally (Fomina and Kucharczyk, 2016, 62). The PiS had a smaller core of support than the Fidesz, which means that it had to create a moderate image to win enough support to gain its majority.

Political Economy Theories

Waldner and Lust (2018) describe how political economy theories explain democratic backsliding as the result of socio-economic variables, with four categories including (1) distribution of income, (2) level of income, (3) short-term macroeconomic performance, and (4) source of income (101-103).
the wealthiest 10% of households possessing 37% of the wealth while the poorest 25% owned only 1%, positing the middle class owned the remaining 62% of the wealth in Poland (Brzeziński, 2017, 6). Income inequality was slightly higher in 2015, just meeting the average set by highly developed countries (Brzeziński, 2017, 3-4).

While Poland’s economy remained stable, the PiS was able to appeal to Poles in poorer regions and across Poland’s small towns that felt left behind by economic liberalism (Orenstein and Bugaric, 2020, 12). The Civic Platform, which had controlled Poland’s government before 2015, failed to win working-class support—struggling with $200-a-month contracts in many regions across Poland (Orenstein and Bugaric, 2020, 13). The PiS is economically nationalist, such as its income tax exemption for Poles under the age of 26 to prevent youth emigration and the Family 500+ program, which provides $144 a month per child (for all children beyond a family’s first initial child) (Orenstein and Bugaric, 2020, 13).

Social Structure and Political Coalitions Theories

Theories about social structure and political coalitions explain how social conflict and heterogeneity between groups along socio-cultural (linguistic, racial, religious, and other personal attributes) and economic (sectoral and class) axes result in backsliding (Waldner and Lust, 2018, 103).

Hungary

In Hungary, high-tech multinational corporations outcompeted Hungarian corporations with greater productivity and profitability (Scheiring, 2021, 270-271). These corporations contributed little to the Hungarian national economy or its workers as they imported technology and limited their jobs in Hungary to low-skill manufacturing while preserving advanced jobs in their home countries (Scheiring, 2021, 271). This polarized the Hungarian capitalist class that shifted to support the Fidesz party leading up to the 2010 election (Scheiring, 2021, 271).

Hungary also had two competing parties, the Hungarian Socialist Party (MSZP) and the Fidesz, both representing the polarized socio-cultural axis. These parties unified their bases and coalitions around left (MSZP) and right (Fidesz) labels—increasingly failing to reach institutional consensus due to not recognizing each other as legitimate (Vegetti, 2019, 88). This polarization emerged in 2002 as the left-liberal coalition took government control from the Fidesz party, and Viktor Orbán refused to acknowledge the results and shifted the Fidesz in a populist direction by targeting political elites, criticizing multinational corporations, and prioritizing national symbols (Vegetti, 2019, 86). Hungarian society remains consumed by political identities that infiltrate families, political institutions, and friendships in Hungary with political leaders using divisive rhetoric (Lengyel and Ilonski, 2010, 165-167). Ultimately, the Fidesz party worked to eliminate the power of the MSZP, and as a result, used electoral reforms and removed checks to achieve this end (Vegetti, 2019, 92).

Poland

In Poland, polarization emerged around two different conceptions of nationalism. The PiS party has traditional ideas of nationalism—defending Catholic values—and using slogans such as “mission, martyrdom, and sovereignty” (Sweeney, 2020, 38). This conception of nationalism by the PiS has won the favor of those feeling disaffected and abandoned by liberalism, westernization, and the actions of the Civic Platform government. The PiS used religious appeals, economic policies, and stoked fear of refugees to achieve electoral success in 2015, and it continues to use nationalism as a powerful counter to that of the Civic Platform party (Sweeney, 2020, 39). Crucially, the Civic Platform and PiS promote opposing paths in creating security, wealth, and stability, and they possess divergent worldviews, which has resulted in this polarization between the two parties. Thus, the PiS worked to remove checks that could be leveraged by the Civic Platform through the Constitutional Tribunal.

International Factors Theories

International factors theories of democratic backsliding explain democratic backsliding through international influence (Waldner and Lust, 2018, 105).

Hungary

It is critical to note the role of the European Union when discussing democratic backsliding in Hungary as it is a member state. The European Union
requires that all states seeking membership have liberal, consolidated democracies. While Hungary once fit this category, it was ultimately compromised by constitutional flaws and conditions, allowing the Fidesz party to win a two-thirds parliamentary majority. The EU never fully confronted the Fidesz-led Hungarian government as undemocratic reforms were made after 2010 except for when they violated EU treaty clauses or the European Court of Human Rights’ case law (Bozoki and Hegedus, 2018, 1179).

As a result, the EU helped the Fidesz regime consolidate its rule by stabilizing and legitimizing it (Bozoki and Hegedus, 2018, 1178). Due to the Fidesz party’s control over Hungarian spending, the Fidesz party used EU cohesion funds to its advantage, creating an unfair advantage and fueling corruption (Bozoki and Hegedus, 2018, 1181). Critically, the EU failed to use its Article 7 power—from the Treaty on the European Union (TEU) to take legal action against Hungary if investigations found violations of its provisions (Bozoki and Hegedus, 2018, 1181-1182). Thus, it is clear that the EU failed to act and provided funds to the Fidesz regime early in Hungary’s democratic backsliding—allowing the Fidesz to consolidate its rule with EU cohesion funds.

**Poland**

Poland’s democratic backsliding occurred after Hungary’s. Poland and Hungary formed an illiberal coalition to support each other. First, Poland and Hungary have worked to legitimize each other as democratic backsliding had begun. When the Fidesz party took power in 2010, Donald Tusk (then the Prime Minister belonging to the Civic Platform party) publicly defended Hungary, along with the PiS, when the EU sought to sanction Hungary (Holesch and Kyriazi, 2022, 12-13). After the PiS gained control of the Polish government, Fidesz-led Hungary publicly decried Article 7 actions taken by the EU against the PiS government in February 2018 (Holesch and Kyriazi, 2022, 13).

Critically, the PiS learned from the Fidesz party, imitating many of the Fidesz party’s illiberal reforms. The PiS viewed the illiberal policies used by the Fidesz-led government as a Catholic conservative revolution—proving that such was possible within the EU (Holesch and Kyriazi, 2022, 10). Perhaps the best example of this is both parties’ targeting of the judiciaries in their countries with the power of judicial review with the Fidesz politically appointing judges, reorganizing the judiciary’s administration, and lowering the retirement age for judges, and the PiS blocking Civic Platform judges, appointing their own judges, and ultimately lowering the retirement age for judges (Holesch and Kyriazi, 2022, 11).

Additionally, Hungary and Poland have defended each other against Article 7 proceedings by the EU that may have halted democratic backsliding if they were alone. In 2012, the EU challenged the Hungarian government through infringement proceedings regarding Article 258 TFEU, and Donald Tusk spoke out against these proceedings and offered Polish political support (Holesch and Kyriazi, 2022, 8-9). Over thirteen debates held in the European Parliament on Hungary’s illiberal reforms, the PiS repeatedly supported the Fidesz (Holesch and Kyriazi, 2022, 9). Additionally, in March of 2018, the Fidesz members of the European Parliament voted to go against the European Commission’s decision to initiate Article 7 proceedings against the PiS government for its interference in the Constitutional Tribunal (Holesch and Kyriazi, 2022, 9).

**Conclusions**

While both Hungary and Poland have experienced democratic backsliding, it seems apparent that Hungary and Poland have significant differences in the extent and reasons for democratic backsliding within their democracies.

Hungary’s democratic backsliding was more extensive than Poland’s, but this paper has pointed to key differences between these countries that explain why Hungary’s backsliding was more extensive. Critically, Hungary’s parliament is unicameral, and the original Hungarian Constitution provided a disproportionate number of seats to the majority party—allowing the Fidesz to win a supermajority of seats—and failing to constrain the Fidesz supermajority from making illiberal reforms. However, as the political economy, social structure and political coalitions, and international factors theories of democratic backsliding demonstrate, Hungary was also vulnerable to democratic backsliding because it had experienced an economic downturn due to its globalized economy, widespread political polarization.
due to divisive party rhetoric, and because of the European Union’s failure to set limits and punish the Fidesz party for its illiberal reforms.

On the other hand, Poland has experienced less extensive democratic backsliding and testing each of the six theories of democratic backsliding demonstrated the factors that constrained the PiS government from making significant illiberal reforms to Poland’s government. On the one hand, Jarosław Kaczyński was instrumental in controlling the PiS and in shaping its illiberal political positions, but on the other, Kaczyński’s influence was limited beyond the PiS party’s internal affairs after 2015. Additionally, power is more decentralized in Poland because its legislature is bicameral (the Sejm lower house and Senate upper house) complete with a prime minister and president. As a result, the PiS has had to moderate its reforms to avoid losing its majority in the legislature and to avoid losing the presidency.

Poland’s economy was and remains relatively stable, perhaps preventing the PiS from gaining the support needed to make drastic illiberal reforms to Poland’s government. Additionally, Poland’s political culture appears politically conservative, and its social structure and political coalitions polarized to a lesser extent than Hungary’s in 2010. International factors may have been instrumental in shaping the PiS’s party positions and international factors such as the 2015 Refugee Crisis in Europe, which may have helped to provide legitimacy to the PiS’s conservative and nationalist policies. Essentially, Hungary and Poland have both arguably experienced democratic backsliding—but the extent of their democratic backsliding was influenced by the constraining factors on the majority parties within their democracies. Hungary had fewer constraining factors and ideal conditions for an illiberal party to gain power and centralize its power; Poland had more constraining factors and less ideal conditions to allow the PiS to enact illiberal reforms. Future research should focus on how institutional constraining factors may influence illiberal political party reforms to uncover the significance of this relationship.

Bibliography


