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DEHUMANIZATION AND THE POWER HIERARCHY IN BLACK MIRROR’S “MEN AGAINST FIRE”

CHRISTINE GUILLIE, EASTERN OREGON UNIVERSITY
MENTOR: NANCY KNOWLES

Abstract

Charlie Brooker’s popular Netflix series Black Mirror has never failed to reflect society’s shadows, and season three’s “Men Against Fire” carries the torch in revealing that our dependence on technology leads to othering, dehumanization, and a perpetual power struggle. As technology rapidly evolves, its tendrils sink further into the human, organic world, making it increasingly difficult for humans to behave ethically as we gain power. Simultaneously, those at the other end of the spectrum are dehumanized as they are monitored and manipulated through the use of technology and power. The links between “Men Against Fire” and both historical and modern accounts, including the Holocaust and today’s refugee crisis, show that we do not change and are unprepared to keep up with the power that technology brings. Compelling dialogue, combined with first-person angles, gives the audience a firsthand view of a not-so-distant future in which our willingness to become socially distant and indifferent to suffering outside of our own group has led to the destruction of society and to the ongoing mission to destroy an entire population of powerless people. The intricate web of relation between power, technology, dehumanization, privacy, and xenophobia is strikingly evident in both “Men Against Fire” and our own world, offering a haunting premonition of our potential future state.

In an ever-evolving world of technology, data, and surveillance, the only information that can truly be kept private—if the owner chooses to do so—is internal, and arguably the most valuable information in existence. This information is internal thought generated by what is ingested by the eyes, ears, skin, tongue, and nose, from conscious thought produced during the day to subconscious images, emotions, and sensations dancing across the mind while we sleep, to the information written in every cell in the body, in the DNA. To monitor all of this information is to be at the highest tier of a hierarchy of power, and Black Mirror’s episode “Men Against Fire” depicts one entity in this highest position influencing an entire world to eradicate some of its own. What is most disturbing about this episode is the fact that many elements within it are prominent in our world today. “Men Against Fire,” like many episodes of Black Mirror, is a fictionalized reflection of some of the darkest characteristics of our society: technology’s dehumanizing tendencies; violations of privacy through unethical surveillance; lack of humanity; and the fact that, when in the hands of the most
powerful, technology is at its most uncontrollable, unescapable form, making resistance nearly impossible.

Technology as a Conduit to Power in “Men Against Fire”

Black Mirror writer Charlie Brooker weaves a horrific, cautionary tale of technological dependence in which DNA reveals so-called weaknesses—predisposition to disease, mental illness, criminal or sexual deviance—and leads the world to view this disadvantaged group as “roaches,” or targets to be eliminated. Soldiers are outfitted with chips called “Mass,” which create a sort of sensual overlay, allowing the soldiers to communicate with others wirelessly and to view within their fields of vision statistics and maps related to their missions. The chips also assist them in combat, for example, helping to increase their targeting accuracy. However helpful the implants are, soldiers armed with them are transformed from humans to war machines, able to eradicate their targets without empathy, because of the implants’ ability to mask human faces and distort pleas for help into unintelligible screeches—an ability the soldiers themselves are not aware of. The Mass implants monitor every moment of the soldiers’ lives, including their dreams. Dehumanization is found on each level of the power scheme: Technology and its controller are at the very top, with complete control over the soldiers’ actions; soldiers cannot experience empathy or even truly see the world without technology-induced warping and are rewarded with fabricated sexual visions; civilians view the roaches as subhuman despite the civilians’ lack of Mass implants; and roaches are hunted without remorse because of diseases and weaknesses revealed by their DNA.

“Men Against Fire” follows Stripe, a rookie soldier, as he sets out for his first “roach hunt” (00:00:32). The rest of the group preparing for the mission seem eager to participate in the day’s activities, filled with both a sense of duty to fulfill their orders and a sense of excitement, convinced that they are doing what is right for the world. Stripe appears hesitant, wary of facing these faceless “roaches,” but also displays a small glimmer of enthusiasm at the idea of his first time in the field. Fellow soldier Raiman boasts of her hunting skills, while Len offers a piece of advice to Stripe: “When you see one right here, try not to shit your pants. It’s only gonna piss them off” (00:01:08). The group lets out shouts of anticipation as a vehicle hauls them to the site of a suspected roach attack, where food stores have been burglarized and the remaining supplies deemed inconsumable.

Stripe joins a smaller group traveling outside of the village to confront “religious freak” and suspected roach-hoarder Parn Heidekker, where he experiences his first roach encounter. We see, through the lens of a drone, Heidekker’s large, dilapidated home (00:05:55). The soldiers have been alerted by the villagers of the possibility that the structure is a roach haven. Medina, the soldiers’ leader, launches a small device at the home that latches on to a wall and projects the layout of the home
into the soldiers’ Mass implants. Stripe is commanded to search the home while Medina questions Heidekker. The music is ominous as Stripe and his comrade Raiman search the upper rooms, which are darkened by blacked-out windows and littered with religious paintings and artifacts. Raiman finds a false wall in a closet and kicks it in, revealing a “roach nest” (00:10:26); Stripe follows. After a suspenseful struggle, he fulfills his primary responsibility—eradicating a roach. During the fight, the roach uses a device to interrupt Stripe’s Mass implant signal, which is where the unraveling of the entire Mass system begins.

The true use of the Mass implant and the power wielded by its operators are not revealed until the end of the episode. The audience learns with Stripe that the roaches are actually humans and the Mass implants are contraptions used to mask the roaches’ human faces, making them easier for the soldiers to kill. Upon this realization, Stripe is given the choice to have his memory of the secret of Mass wiped, to start over as a fresh-minded soldier, again oblivious to the true goal behind his missions, or to watch himself murder the man in Heidekker’s home on perpetual loop. Ultimately, he caves to the power of the Mass system and the figures behind it, choosing to become an ignorant instrument once again.

The relationships between the forces of power, technology, information, and surveillance in “Men Against Fire” are not unlike relationships that exist in the world today, such as in surveillance of users online, controversies about medical data and other private information, xenophobia, and the refugee crisis.

Surveillance

Privacy is a basic human right, but the magnitude of violation of privacy is often overlooked or understated, as is seen in the world today and reflected in “Men Against Fire.” Surveillance is yet another method of garnering information to use against individuals and groups. Torin Monahan discusses the fallacies of and controversies surrounding surveillance in his article “Surveillance as Cultural Practice,” arguing that it comes with “fundamental critiques,” such as that it affords the violent abstraction of people and their actions from their primary contexts; that it is predicated upon biased valuations of some populations or activities of over others; that its governing logics are opaque, making them difficult to discern or contest; that it denies or ignores its own partiality and situatedness. (502)

Surveillance is a direct violation of privacy, but more than that, it is dangerous in that the laws meant to govern it are vague and peppered with loopholes. A recent example of such a law is the Foreign Intelligence Surveillance Act of 1978 Amendments Act of 2008, renewed in 2018, which essentially allows warrantless surveillance of American citizens’ online activity (“Decoding 702”). The law is justified by the American government as intended to monitor foreign activity in the hope of smiting the
scheming of terrorist groups, but the methods used, called “upstream surveillance,” incidentally also pick up American communications (Sanchez). Such surveillance is a violation of the Fourth Amendment, but the National Security Agency claims that “it is often difficult to be confident in realtime where the endpoints of an Internet communication are located” (Sanchez). Another example of unethical monitoring includes the monitoring of online activity of users around the world today, as concerns grow over what the collected information is used for and how invasive such monitoring may be. Surveillance via technology, even when conducted with “good” intentions, violates the privacy of innocent citizens.

It is through surveillance that the roaches are so easily dehumanized. The truth behind the roach facade is revealed to Stripe after his Mass implant is disabled in the initial fight at Heidekker’s and he comes face-to-face with a roach, Catarina, who explains:

Ten years ago it began. Postwar. First, the screening program, the DNA checks, then the register, the emergency measures, and soon everyone calls us creatures, filthy creatures. Every voice, the TV, the computer, say we have sickness in us, we have weakness, it’s in our blood, that our blood cannot go on, that we cannot go on. My name was Catarina . . . now we are just roach. But now you see me. (“Men Against Fire” 00:43:40)

Catarina, like the rest of the roaches the audience sees, is homeless, without food or access to medicine. Being reduced to a series of medical data in place of a valuable human life has assigned the roach to the lowest category in the power hierarchy: subhuman, sick and weak. By obtaining personal medical data through technological surveillance, the governing agency is able to deem the roaches unfit to live, ultimately staking claim over an incredibly valuable thing about being human, a basic right: the power of choice. As Solove argues about the value of data (88), the roaches’ power was extinguished by the governing agency’s possession of their personal data.

When confronting suspected roach sympathizer Parn Heidekker, a civilian living on the outskirts of the village, Stripe’s superior even states, “You can’t still see them as human” (00:10:34). The governing entity in the episode has gathered information about the roaches through myriad methods, exposing weaknesses and predispositions over which people have no control, stripping them of any human quality and reducing them to a host of undesirable qualities. Arquette even frowns upon Stripe’s use of the word “he” to describe a roach, emphasizing that a roach is an “it” (00:23:05). The link between power, privacy, and dehumanization is solid; in being dehumanized, the roaches automatically plummeted to the bottom of the power hierarchy, so much that other humans, like the villagers, no longer see them as the same species.

Surveillance has led to the gathering of roach information through DNA screenings and medical records, indicating that surveillance is an important extension
of the power of the governing entity in “Men Against Fire.” Surveillance allows the surveyor to identify actions or information as right or wrong, as Torin Monahan points out, with a rigid set of rules regarding how this is determined (502). The surveillance of the soldiers produces a record of rights and wrongs in the military’s eyes: Killing roaches is right and shall be rewarded, whereas showing pity and empathy is wrong and shall be punished. In light of this, on-site military psychologist Arquette defends the government’s partiality during a confrontation with Stripe, during which Stripe is made aware of the effects of the Mass implants. The psychologist cites the possibilities of a visionary world without imperfect bloodlines, a utopia without disease or malice. The impersonality generated by surveillance grants its audience an excuse—how can one argue with solid data? Surveillance—indeed, technology as a whole—creates a very rigid, black-and-white, set of governing rules from the outside but hides a massive gray area behind the screen. The gray area is where the power of technology meets criticism and claims of violation.

Control

Collecting and using private information can be executed through myriad external methods, but through the use of advanced technology, a deeper level of violation can be reached, meaning the reach of control has an even further extension. Internal surveillance and control through the feeding of fabricated information can be used to hardware psychological responses in accordance with a higher agenda.

The minds of the soldiers are influenced so much that they lose their moral compasses without making the conscious choice to do so. The soldier figure in “Men Against Fire” fills the mold of the prisoner in Bentham’s Panopticon, despite the soldier’s power over the roaches and villagers. Michel Foucault analyzes the prisoner in the Panopticon, a theoretical prison designed by Jeremy Bentham, in which the prisoner is surveilled consistently from all angles. In his article “Panopticism,” Foucault describes the Panopticon as a prison in which the prisoner is always visible, always supervised (229–230); he argues that the prisoner “is seen, but he does not see; he is the object of information, never a subject in communication” (230).

As the soldiers are constantly monitored, the government and its military are always aware of what the soldiers are experiencing and how they are performing. The prisoner is “never a subject in communication,” in that they are unaware of the true intention of their mission. This control is a level unparalleled in the “Men Against Fire” universe; even the roaches have the right to private thoughts, have families, and have the ability to escape. By having valuable information withheld from them, like the truth about the mission they are carrying out, the soldiers are essentially unquestioning instruments in the power hierarchy and are oblivious to their own dehumanization. As Arquette states during the confrontation with Stripe, humans are naturally empathetic, which is problematic when they are required by a higher power.
to kill an enemy. “Men Against Fire” takes this idea and shows that technology not only allows the removal of the human empathy but also exacerbates and rewards unempathetic and even violent behavior.

Arquette carefully measures Stripe’s moral compass after his first kill, asking how it felt emotionally to take a life. Stripe implies that he felt justified, that it was “self-protection,” and that he felt relieved but that he did feel something was missing: regret (00:23:18). Arquette asks, “So you’d do it again?” to which Stripe responds, “Yeah, sure.” Arquette congratulates Stripe on his success, and the meeting concludes. This interview seems like a regular check on the mental status of a soldier who has just experienced battle for the first time, but really, it is Arquette performing the duty instilled in him by the military to ensure that the Mass is working as intended: removing empathy and maximizing performance. For the average morally sound person to remain thoroughly apathetic to the killing of humans, the subject would need to be completely unaware of this missing moral component; so long as the subject is lacking information, the subject remains under control.

Information is the main source of energy for the entire power scheme in “Men Against Fire,” and the means by which it is gathered is questionable, to say the least, breaking a human life down into a series of letters and numbers, making it possible, even inevitable, for the gatherer or watcher to view the subject as data rather than as a person. By only knowing about the roaches, the villagers’ opinions are warped by the control of information. Parn Heidekker has in-person interactions with the roaches and offers them shelter and protection, supporting Clive Norris’s theory. Emotional and social indifference is a normal reaction to data—data is simply information without a face or family—creating a perfect environment for the person who reads the data to perform actions the person would not perform when put in the same situation with a living, speaking human. It is far more comfortable for a person to be inhumane when performing an action from behind a screen or through a mental or physical barrier. This barrier assists soldiers in their duties, and it is the same barrier that dehumanizes the soldiers for the anonymous entity responsible for Mass.

In addition to the direct monitoring of their days, further control is exerted over the soldiers in the form of a reward system exercised in the night: The better the soldier performs, the better the sexual dream will be. One particularly powerful psychological reaction in the human brain is sexual response. James G. Pfaus and colleagues study and analyze sexual conditioning in their article “Who, What, Where, When (and Maybe Even Why)? How the Experience of Sexual Reward Connects Sexual Desire, Preference and Performance.” The authors identify conditioning that occurs through sexual experience, stating, “Associative conditioning creates a brain in which the ends ‘justify’ the means and in which the cues that predict the ends become conditioned incentives” (35). The authors describe this drive as a Pavlovian response (34), explaining that positive sexual experiences drive humans to do what is necessary to obtain another pleasurable sexual experience. When this pleasurable experience
can be programmed through technology, guaranteeing the sexual reward contingent on performance, the sexual experience itself becomes dehumanized—sexual reward via computer rather than human interaction—and dehumanizing at the same time. By use of technology, human responses and internal psychological networks can be manipulated to become a form of control.

Early in the episode, the soldiers are celebrating Stripe’s success. He’s killed two roaches, an incredible feat for his first time in the field. Raiman, a fellow soldier, exclaims, “Damn! First time out, he gets two. Sweet dreams for this asshole. Gonna get a treat tonight” (00:15:51). The following scene, shot from a first-person point of view, reveals what the “treat” is: Stripe’s dream of a sexual encounter with a woman, presumably his partner, in lingerie. As Natalie Zutter states in her review of the episode, “The Face of the Enemy: Black Mirror, ‘Men Against Fire,’” this is “positive reinforcement through soldiers’ dreams, which kills two birds with one stone by keeping them in line on the battlefield and less likely to be plagued by PTSD if they make it home.” The reward system is a direct psychological conditioning, a mental tampering that encourages the soldiers on a subconscious level to kill. The human instincts that still exist within the soldiers’ brains, outside of the implant, crave the sexual reward that is attained through success in the field, motivating them to perform as expected.

At the end of the episode, we see two scenes happening in one. In one version, we see through Stripe’s eyes a clean, welcoming home awash with bright, warm sunlight, and the woman from his dreams smiling at him from the porch, beckoning him. Just before the credits roll, we see reality: The house is derelict and empty. Not only has the government implanted sexual dreams into Stripe’s mind, it has fabricated his home and relationship. The tendrils of power and control have become anchored into the subconscious core of Stripe’s mind, demonstrating clear violations of what the world today generally considers ethical.

Questions about ethics and morality are raised in a series of instances in “Men Against Fire,” from the gathering of personal data about the roaches to the illusions projected into the minds of the soldiers. Sophie Gilbert reviews the episode in her article “Black Mirror’s ‘Men Against Fire’ Tackles High-Tech Warfare,” stating,

The episode made me think about augmented reality, and the ethical boundaries that don’t yet exist when it comes to showing people things that aren’t there. It was also a persuasive and nuanced exploration of military valor, and the potential might of an army that could fight without morality getting in the way.

One of the most blatant differences between humans and animals is morality. Stripping the soldiers in “Men Against War” of that morality entitles them to carry out their mission without question, their morality unmolested, while the audience watches in horror. When their augmented reality is tailored to the individuals via the
dissection of personal data, these soldiers are essentially turned into animalistic beings, making manipulation of them a simpler task.

Because of its prospective uses, personal data represents one of the most potent sources of power in the mechanism of control. In his article “The Value of Personal Information,” Daniel J. Solove discusses the power that private information holds: “The value [of personal information] is in the ability to prevent others from gaining power and control over an individual” (88). When personal information is exposed, power is shifted from the owner to the receiver of the information. In the context of “Men Against Fire,” being able to know the ins and outs of the minds of the soldiers via the Mass system gives the military power over the soldiers and, in turn, dehumanizes the soldiers.

When we are aware that we are being watched, we behave differently, according to the values of the watcher. Personal privacy allows us to make choices of our own free will, knowing that our thoughts and intentions are safe and our own. Neil M. Richards writes about the hazards of close observation in his article “The Dangers of Surveillance,” arguing that a multitude of vulnerabilities come with being watched, one of which being the way the garnered information might be used against the subject:

A second special harm that surveillance poses is its effect on the power dynamic between the watcher and the watched. This disparity creates the risk of a variety of harms, such as discrimination, coercion, and the threat of selective enforcement, where critics of the government can be prosecuted or blackmailed for wrongdoing unrelated to the purpose of the surveillance. (1935)

Knowing that we might be prosecuted or blackmailed based on our activities, we are manipulated into performing in a manner that aligns with the laws of the watcher. This means that the watched are at the mercy of the watcher and that the watcher is at an all-powerful point in a power hierarchy, bolstered by the use of technology—thus the Mass implant.

In his final interview with Arquette, Stripe watches a clip of himself agreeing to have the Mass implant activated (00:52:42). The military representative explains, “[The implant] works kind of like hypnosis . . . part of what you’re agreeing to is not realizing you’ve been put in this state, if you follow me. You won’t recall this conversation” (00:52:42). The soldiers are continually monitored through the Mass implants, which, among uses already discussed, come into play as high-tech bodycams that cannot be disabled or removed. Complete observation and control leave no capacity for free will, which in this case means no capacity for empathy, and this complete surveillance is only amplified by the fact that the soldiers are unaware of the “hypnosis” after the implantation. With the soldiers’ lack of awareness of the power being exerted over them, the gap in the power hierarchy widens.
Removing the internal moral struggle is possible for the soldiers through the futuristic Mass implant, but looking at the larger picture, the controlling entity in the episode faces many ethical conflicts. In his review “In Men Against Fire, Black Mirror Takes on the Future of Warfare,” Andrew Liptak argues,

In every war, soldiers are trained to dehumanize enemies, to maximize their effectiveness by minimizing the impact of potentially taking another life. In a world where that process can be programmed into soldiers, what’s left unsaid is the way any undesirable can be targeted with the flip of a switch.

This “flip of a switch” takes place when the implant is activated, giving complete control to the government and its authorities, like Arquette, who exercises this control when he forces Stripe into choosing unawareness or eternal digital hell. There is a desperate need to protect the public from the violations exuded by surveillance and control. While we may not be subject to the power of the Mass system today, we are audience to a multitude of other sources constantly feeding us information.

Some of the most powerful forces that use information to sway their audiences are all of the media sources around us, such as social networking websites, television shows, and the news. Stuart Hall, in his article “Whites of Their Eyes: Racist Ideologies and the Media,” argues that racist ideologies are used in the media to persuade the masses. An ideology is the mass belief and value system of a group; one example includes the different political parties present in the United States. As groups gain popularity, their ideologies are broadcast through various forms of media, increasing the reach of their beliefs and recruiting more believers and participants. Hall argues,

Institutions like the media are peculiarly central to the matter [of ideology] since they are, by definition, part of the dominant means of ideological production. What they “produce” is, precisely, representations of the social world, images, descriptions, explanations and frames for understanding how the world is and why it works as it is said and shown to work. (19–20)

The media is yet another extension of technology, altering the way that audiences perceive the world and the different groups that inhabit it. In this way, the media is a tool in control, a feed of information that we cannot verify as true or false. The image of an individual or group can be labeled as good or bad, as a leader who should be followed or as a group that should be persecuted, consistently dividing and marginalizing the subject and the viewers. The louder the group, the more widespread its ideology becomes, meaning that the most powerful entities will continue gaining power through media exposure.

The incredible power behind the information channeled to and from us through technology is concerning, as privacy violations are certain. The Mass implants of “Men Against Fire” are materialized versions of what the media does to us today—masking our senses to sway us to follow the agenda of those in higher power. We see what they want us to see. It is a desireable thought that “Men Against Fire” is
unrealistic, but the reality is that our world is not much different. Data is collected from users’ online interactions and sold to entities, who in turn try to sell us more products or to sell us opinions disguised as facts.

As Hall states, society is fed an image of the world and told that the image is truth (20). Society is a hopeless consumer of information without a completely reliable filter with which to discern fact from opinion or fiction. In this way, consumers are similar to the soldier in “Men Against Fire,” seeing the world through a lens provided to them by higher powers, seeing as they are told to see. This is reinforced by the scenes in which the audience sees through Stripe’s eyes; the camera is shaky and unstable, in a found-footage style, so that we see what he sees—what Mass wants him to see.

Dehumanization

Although some argue that technology is not directly responsible for dehumanization, the potential that lies within technology is too great to ignore. Ruth Davis writes in her article “Technology as a Deterrent to Dehumanization” that technology only aids us in our daily lives and that “we have never been able to program prejudice into a computer so that it can differentiate its output on the basis of concern or lack of concern with human values” (737). While it is true that technology itself is an inanimate object as mundane as a piece of furniture, technology also holds a massive power that can easily be channeled in a dehumanizing manner. Other inanimate objects can be used as weapons—guns, for example—but as is argued in today’s gun-rights controversy, not all humans are responsible, empathetic, and good enough to trust with such power. The truth is that technology is completely uncontrollable and that its uses and power are boundless. Technology is simply too easily wielded as a weapon, used to reap, monitor, and manipulate personal data for nefarious purposes.

Dehumanization via technology occurs all around us, even on smaller scales, as is evident in modern society’s reliance on technology to communicate, making deep face-to-face interaction and connection increasingly rare. In his article “From Personal to Digital: CCTV, the Panopticon, and the Technical Mediation of Suspicion and Social Control,” Clive Norris argues the importance of face-to-face knowledge, stating that without it, we are more likely to dehumanize: “When we only know about people our knowledge is secondhand, based on media accounts, official reports, gossip, rumor, and heresay, and there is the danger that our judgment falls prey to stereotypical prejudice and results in the dehumanization of the ‘other’” (251). It is far easier to believe a rumor about someone we do not know than it is to believe gossip regarding a close friend with whom we regularly interact in person. As society’s dependence on technology grows, personal interaction lessens and these “media accounts, official reports, gossip, rumor, and heresay” become increasingly more
prevalent in our daily lives, which leads to the dehumanization of the subjects of such information. We read and learn about celebrity drama, turmoil within governments, and gossip about old schoolmates, and as Norris argues, this information forms our view of the subject. What is broadcast to us about someone we do not interact with is almost always unverifiable, making it easier for the provider of the information to manipulate our opinion of the subject. This manipulation dehumanizes both the receiver and the subject: The receiver is left without essential knowledge that would allow him or her to develop an honest opinion, and the subject’s privacy is violated and their image or reputation left to the mercy of the provider of the information. This process is a common factor in the causation of othering, or separating ourselves from those whom we deem to be fundamentally different in some way.

As humans, we easily fall victim to othering—both participating in and being the subject of it. We commit the act of othering when we see differences, whether in race, gender, power status, or financial status—and the list goes on. This is a problem, because the forming of these groups leads to a power struggle; there will always be a group more powerful than our own, just as there will always be a group less powerful. This enables distancing on social and even physical levels, as well as oppression. Mina Cikara and colleagues examine othering in their article “Us and Them: Intergroup Failures of Empathy” and argue that “failures of empathy are especially likely if a sufferer is socially distant—for example, a member of a different social or cultural group” (149). Also supportive of this idea are Emile Bruneau and Nour Kteily, who, in their article “The Enemy as Animal: Symmetric Dehumanization During Asymmetric Warfare,” discuss dehumanization and how aggressive acts, such as slavery, are enabled through othering, finding that “historically, dehumanization has enabled members of advantaged groups to ‘morally disengage’ from disadvantaged group suffering, thereby facilitating acts of intergroup aggression such as colonization, slavery and genocide” (1). Bruneau and Kteily state, “We observed . . . that the more individuals subjectively perceived that their group had power, the more likely they were to express blatant dehumanization of the outgroup” (15). Humans have a natural inclination to display aggression and contempt when faced with a group that has been identified as other, especially when the other group is at a disadvantage. We see this in the real world in myriad examples, from well-recorded historical events such as the Holocaust to modern world events like the Syrian refugee crisis. We are more likely to remain ignorant of suffering if it does not directly affect our own group’s well-being or power status, and we are also predisposed to exude aggression toward those we perceive to be of lesser power than us.

Othering allows us to find our own identities, to see the unique qualities within each person, and to appreciate the diversity that such identities afford us. Diversity has recently become a celebrated notion in a number of social institutions, including schools and workplaces, but Prieto argues that to identify differences is to encourage exclusion and directly create the “other”: “At present, fear of the stranger remains: the
one who is different is considered as barbarian, terrorist or even subhuman” (301). By recognizing differences, we create stark boundaries between “us” and “them,” creating competition and struggle outside of the group but also unity and strength within it. Although their article “Race, Xenophobia, and Punitiveness Among the American Public” discusses xenophobia in terms of racial and ethnic differences, Joseph Baker and colleagues state that “social control is wielded by powerful groups in response to perceived threats to their collective interests” (364). When comparing Prieto’s idea to that of Baker and colleagues, one can conclude that identifying a group or individual as different, even with positive intentions, leads to inevitable friction between groups. “Different” means “other,” creating separate groups and opening up the opportunity for the organization of a power hierarchy between the groups. The innate need to identify oneself and to identify the other is omnipresent, a survival skill from a time when the need to identify an immediate threat was vital, and it has spilled over into modern times to disallow unification of people, leading to fear of and aggression toward the “other.”

The black-and-white nature of surveillance in the episode “Men Against Fire” leads to fear of the “other,” a fear that fuels elitism and becomes the foundation of genocide. The governing entity has identified the differences in the population: There are healthy, acceptable people, and there are roaches. This explicit othering opens the world up to tribalism, a toxic mindset in which different is equal to enemy. When Stripe becomes aware of the true function of the Mass implant, Arquette explains why the eradication of roaches is an acceptable ideal:

Do you have any idea the amount of shit that’s in their DNA? Higher rates of cancer, muscular dystrophy, MS, SLS, substandard IQ, criminal tendencies, sexual deviances. It’s all there. The screening shows it. Is that what you want for the next generation? Don’t feel bad about doing your job. The villagers won’t do it. The folks back home won’t do it. They don’t have Mass [implants]. Mass lets you do it. You, you’re protecting the bloodline. And that, my friend, is an honor. (00:50:52)

Arquette explicitly states that Mass enables the genocide; technology has aided existing xenophobia and made the central conflict of the episode possible. Arquette cites “the bloodline” as worthy of ultimate protection, again implying elitism, as if there is one perfect model of a human. This is almost identical to the ideology of eugenics used to manipulate the masses during World War II.

When discussing xenophobia, it is typical to imagine division stemming from difference in race or nationality, but “Men Against Fire” amplifies this fear to include medical complications and to be so powerful as to drive nations to wipe out entire groups of marginalized people. Arquette’s list of undesirable qualities includes some that lead to imprisonment today, such as criminal tendencies and sexual deviances,
although today, having a family history of cancer or MS is rarely, if ever, used as a reason to punish someone.

While the soldiers have the Mass implant to blame for their delusionary acts, the ideas of the villagers in “Men Against Fire” are completely developed through external influence. The villagers are part of the one group in the power scheme that is an outlier; neither hunter nor hunted, the civilians do not have Mass implants, yet they still demand that the soldiers rid the world of roaches. In the beginning of the episode, before the audience sees what a roach looks like to the soldiers or learns why roaches appear that way, the soldiers visit a decrepit village that has recently been ransacked by a group of roaches. A villager explains to Stripe’s superior through a translator: “It must have been roaches. All the mess. It must have been them. They’ve been in the food. We’ll have to destroy everything they left. No one will eat it” (00:03:11). Other villagers contribute to the conflict, giving the soldiers directions to the home of a roach sympathizer. One woman reaches out to Stripe and pleads in broken English, “Stop them coming. Please, you must stop [them]. I have [a] child who is scared” (00:04:09). The evident fear in the village leads the audience to empathize with its inhabitants, as the audience has not yet seen either the human or demonized faces of the roaches. The roaches are perceived as greedy, infectious hosts of disease and violent tendencies, but the audience later learns that they are just people struggling to survive, forced to vandalize, steal, and squat in order to sustain themselves. The villagers are aware of what the soldiers are not—that roaches look, think, and sound exactly like them but are carriers of undesirable traits and medical problems. This display of intentional elitism is a stark contrast to the induced elitism of the soldiers, who are controlled by technology and its master. The villagers do not need the implants to separate themselves and dehumanize the roaches. This is a tragic testament to the natural tendency of people to conform to the beliefs of a group more powerful than their own, and the ability to separate oneself from the plight of another person or group, also known as othering.

The governing entity in the “Men Against Fire” universe has inserted social distance via implication of social difference, thus splitting the civilian population and heightening the rank of healthy civilians over roaches in the power hierarchy. This elevation has allotted the villagers the right to exert power over the roaches. Cikara argues that distance has enabled the dismissal of empathy, as is evident of the villagers’ treatment toward roaches and of the emotional rift between roaches and villagers (149). The villagers are able to separate themselves from the roaches because they, the villagers, are more powerful, and they are more powerful because they are separate. As Bruneau and Kteily point out, aggression is also enabled when there is a perceived status difference between groups. The specific mention of genocide in their article (p. 1) strengthens the idea that confirming difference and advantage over a group allows room for heinous acts, which the villagers contribute to by reporting the vandalization incident and revealing a roach safe haven to the soldiers.
These acts are eerily similar to the behavior of European civilians during the Holocaust. The themes of xenophobia, genocide, and control in the episode align almost exactly to this dark mark upon human history. People being deemed unfit based on certain qualities by the higher entity within “Men Against Fire” is nearly identical to the plight experienced by the Jewish population and other “unfit” groups of Germany, Austria, Poland, and nearby countries. Mark P. Mostert investigates the treatment of the disabled in Nazi Germany in his article “Useless Eaters: Disability as Genocidal Marker in Nazi Germany,” citing eugenics as the driver of the eradication of Jews and other groups, stating that “eugenics was described by its leading American proponent, Charles Davenport, as ‘the science of the improvement of the human race by better breeding’” (158). Eugenics was, and is, an attempt to create the perfect human race, free of medical imperfections, even going so far as trying to engineer the appearance of the human race to fit the “superior” image. Davenport studied methods of breeding for skin and eye color and, eventually, for the eradication of genetic disorders (Witkowski), which does seem like a wonderful notion for the good of the world, but such a world comes at a great, unethical cost. In selectively eliminating traits deemed inferior, the scientists who supported eugenics were dehumanizing the people who carried the traits they wished to make obsolete. People were reduced from humans to medical data; if one did not align with the eugenics agenda, one was disposable.

Although often a subconscious process, an innate realization that someone is different from our own group, othering can also take place in a very explicit, external manner. For example, Adolf Hitler referred to Jews as ungeziefer, meaning vermin or pest, among other insulting descriptions, stating in his political manifesto Mein Kampf, “The Jew has ever been a nomad, but always a parasite, battenning on the substance of others.” In his article “What Role Do Metaphors Play in Racial Prejudice? The Function of Antisemitic Imagery in Hitler’s Mein Kampf,” Andreas Musolff examines different terminology utilized in Hitler’s text to describe Jewish people and culture, listing labels such as germ, agent of disease, decomposing agent, maggot, infection, epidemic, and even syphilis, summarizing that the terms “fit together sufficiently to create an ensemble of causes/agents of illness that suggest a deadly, universal health crisis” (37). The roaches in “Men Against Fire” are seen not only as unfit to live but also as contaminants or agents of disease, as is seen in the beginning of the episode, when the villagers refuse to eat the food that is left over after the roach burglary for fear that it has been corrupted.

A person in power plainly naming a specific group as undesirable is a powerful act, as it opens avenues for those in the middle class of power to oppress those in the lower class of power, expressing distaste at best and exerting violence at worst. This is evident in the horrendous events that ensued after Hitler came into power in the 1930s. The word vermin is closely related to the word roach, furthering the connections between the actions of the soldiers and civilians in “Men Against Fire”
and the soldiers and civilians who were witness to (and in many cases, active participants in) the Holocaust. While weakening and tarnishing the image of one group, othering helps us identify with our own group, strengthening our bonds as well as our boundaries.

During the Holocaust, people turned on their Jewish neighbors, reporting them to the Nazi party out of fear or for reward, whether material or status. Michael A. Grodin and colleagues address the question of how people perceived as morally sound, specifically physicians, could be swayed to carry out horrific deeds in the name of Nazism. In their article “The Nazi Physicians as Leaders in Eugenics and ‘Euthanasia’: Lessons for Today,” they write

By portraying or certifying Jews and other people as racially, physically, or mentally unfit, physicians and government officials claimed to be cleansing Germany of the hereditarily imperfect and the weak. Nazi physicians rose to power and prestige as they used their skills to treat a supposed ‘racial’ sickness that threatened to contaminate the Volkskörper [body of the German people].

It seems that a willing suspension of disbelief overtook the physicians employed by the Nazi party: They were performing honorable duties for the sake of their fellow civilians, supporting the country on its way to a better future. The character of Arquette functions in a similar matter as he diagnoses and treats the soldiers in ways that best serve the goal of the anonymous enemy. The surveillance of European populations led to the collection of data that labeled certain individuals as inferior, which created a hostile environment that encouraged othering and ultimately resulted in genocide of innumerable “undesirables.” A similar illusion of responsibility and duty rules the villagers in the Black Mirror world.

In “Men Against Fire,” the fear of the other has led global forces to attempt complete elimination of the so-called problem at the root. Baker et al. argue that social control is held in the hands of the forces that are perceived to be powerful, an idea that perfectly aligns with the theme of xenophobia in the episode, in the way that disadvantaged groups are identified and persecuted. The authors’ study further reveals that xenophobia is linked to punitiveness and that humans are predisposed to a desire to punish those whom we identify as different from ourselves. This predisposition can only be amplified when it is driven by an even more powerful group, such as a government and its military forces.

The roaches are comparable to the groups persecuted in the Holocaust in that they are identified as a genetic threat to the population. Othering has led to the identification of roaches as scapegoats, so they are no longer seen as important, valuable human beings. As Mostert discusses, this threat to perfection led to innumerable deaths. The obsession with creating a world with medically flawless populations is indistinguishable from the mission of the unseen governing entity in
“Men Against Fire.” The episode’s allusion to World War II and the Nazi regime can be no mistake, suggesting that we do not learn from the past and consistently pursue whatever ideal that the most powerful group declares is desirable. The difference here is the opportunity for total control via technological implants and data gathering in comparison to the Nazis’ powerful influence in the 1930s and ’40s.

The comparison of the conflict in “Men Against Fire” to that of World War II reinforces the idea of our continued tendency to confirm difference and to persecute those who are judged to be different, and therefore lesser, rendering the episode’s storyline even more haunting. The difference, though, is in the incredible leaps in technological advancement that humanity has made since World War II. From the deceptive implantation to the masking of the roaches to Arquette’s ability to disable Stripe’s vision and trap him into carrying on his mission, technology is the ultimate tool at the hands of the master puppeteer: the governing entity in “Men Against Fire” and its military. We rely on technology in similar ways today, and, as Howard Chai argues in his article “‘Black Mirror’ Study Guide: Men Against Fire,” we in turn rely on those who control the technology:

We’re at the mercy of technology. It controls us. The overarching message of Black Mirror is that technology itself is not to blame; we are. . . . We don’t like being spied on, but we welcome digital assistants into our lives with open arms. We say we don’t like giving up control, yet we allow algorithms to dictate most of our online experiences. We know “control is an illusion,” but what happens when the illusion is so enchanting and mesmerizing that we don’t realize it’s there?

While technology is an extremely useful aid in everyday life, the paradox is that humans have become so dependent on technology that it can become difficult to discern if the user or the computer is truly in control. We become participants of a willing suspension of disbelief online at some point or another—users know they are being monitored to a certain extent but know it is the price they pay, and they assume that it is relatively harmless. Through technology, we both dehumanize and are dehumanized. We keep tabs on old friends and enemies, observe tragedies through screens, and leave condolences after an acquaintance dies, but as Cikara argues, the social distance keeps us from truly feeling most tragedies that do not affect us directly. In this way, we are willing to accept the dehumanization that comes with the use of technology because we are able to dehumanize in return. Technology allows the user to complete tasks that would be nearly impossible to achieve otherwise, but at what cost?

Although I agree with Davis that technology itself is not malicious by nature and is in fact helpful to humanity in many ways (737), technology can be used in a way that encourages prejudice and dehumanization, as is evident in “Men Against Fire.” Technology itself is not malicious, but its power is all-consuming when in the hands of
someone who is malicious. Interestingly, this “someone” in “Men Against Fire” is never truly revealed. This willful omission is ominous—could it be a single world leader? Is this the mission of just one country? Perhaps this open-ended hole is a message in itself that technology is a conduit for those in power, whoever they may be. This element enhances the haunting realism of “Men Against Fire,” as we often are unaware of who may be monitoring our activities and who is truly in control, especially while we interact with technology. What makes this work is the illusion of almost complete free will—we do not feel the magnitude of the oppression if we do not see the oppression or oppressor directly. Foucault argues that “power is tolerable only on condition that it mask a substantial part of itself” (The History of Sexuality 86). We endure the control that power exerts upon us only when we are blissfully ignorant of the fact that it exists, which is enabled only by a disguise.

Conclusion

What makes Black Mirror so haunting is the fact that the stories depicted in its episodes are so close to home; no episode is so farfetched as to be completely unbelievable. Each episode is a reflection of the dark parts of society. In “Men Against Fire,” technology is used by the most powerful forces to manipulate and dehumanize people, and those who are dehumanized in turn dehumanize. This is also evident in society today, as is laid out in the examples above, from the violations of privacy around the world, to the othering of those we view as less powerful than ourselves, to the way media employs its massive reach to sway extensive audiences to believe and participate in agendas designated by higher powers.

Let “Men Against Fire,” and the Black Mirror series as a whole, serve as a warning against the power of surveillance, the power of personal data, and the dehumanizing nature of technology and humans in general. When we are oppressed, we oppress, and when given power, we wield it with no mercy, for if we do not, someone will wield it in order to gain power over and dehumanize us.
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ACCEPTANCE, EMPOWERMENT, AND CHANGE: THE EXPERIENCES OF LGBTQ JEWISH WOMEN AT CAMP RAMAH AND BEYOND

LIORA WITTLE, ELON UNIVERSITY
MENTOR: GEOFFREY CLAUSSEN

Abstract

The overlap between being Jewish, LGBTQ, and a woman has not been well studied, and the nuances of these intersecting identities have often been overlooked. Focusing on these intersections, my research examines a group of LGBTQ Jewish women linked by their experiences with one Jewish summer camping network, Camp Ramah, focusing on how they experienced inclusion or exclusion and empowerment or disempowerment. Those I interviewed all had communities they felt fully accepted in, and all felt that Judaism was compatible with their sexuality or gender identity; however, participants did face discrimination at Ramah and in the wider Jewish community. At Ramah, they experienced some discomfort from their peers about their sexuality, and in the wider Jewish community, their sexuality was not acknowledged. Particularly in Orthodox spaces, they also faced discrimination because of their gender. Despite these experiences of discrimination, the participants in my study felt generally accepted in Jewish communities, empowered to change tradition, and able to shape Jewish communities to become even more accepting and inclusive. My research demonstrates how the Conservative movement and the Ramah Camping Movement have become more accepting of LGBTQ Jews and Jewish women, while also showing how those shaped by Conservative movement institutions are now seeking to create more welcoming and diverse communities.

Introduction

Jewish feminists have long recognized that community is an integral part of Judaism. The creation of spaces where any Jew can be fully themselves and where healthy interpersonal relationships can flourish has been an important part of Jewish feminist activism that has led to the transformation of Jewish communities. As Judith Plaskow has argued, the creation of a community of sisterhood is essential for dismantling patriarchy; Jewish communities where women can share their experiences and recognize both commonalities and differences among themselves support individuals to grow beyond their perceived limits and to change Judaism and the secular world.¹ Plaskow has pointed out a similar need for community among

LGBTQ Jews, arguing that the Jewish community needs to challenge the status quo that has categorized LGBTQ people as undesirable and unwelcome in community.²

The difficulties that LGBTQ Jews and Jewish women face often stem from the same source and therefore require similar solutions.³ Jewish feminists in general, and LGBTQ Jews in particular, have especially worked to create welcoming communities, including synagogues and activist organizations. These communities have created spaces where women and queer Jews could be accepted and welcomed and could be fully themselves. LGBTQ Jewish women regularly deal with one or both of their identities being ignored in the communities to which they belong. Feminist organizations may gloss over Judaism or sexuality, and LGBTQ organizations may ignore the difficulties around being a woman. The overlap between being a Jewish woman and being an LGBTQ Jew is infrequently studied and is often overlooked in Jewish communities.

Previous research on LGBTQ Jews, as well as anthologies of personal essays, often discuss the difficulty that queer Jews have in finding a community that accepts them, as well as the difficulty that many queer Jews have had with self-acceptance. Anthologies of LGBTQ Jewish experiences published in the late twentieth century—such as Nice Jewish Girls: A Lesbian Anthology (1982, 1989)—often include stories that involve many years of working toward self-acceptance and acceptance in communities. For example, Evelyn Torton Beck, a Jewish lesbian and feminist, told the story in Nice Jewish Girls of her journey to accepting her sexuality, which took many years and was not a linear progression.⁴ Even after she accepted herself as a lesbian, she was still not welcoming of her daughter coming out as a lesbian.⁵ The process of coming to terms with herself and her sexuality as well as her daughter’s sexuality was long and fraught with complications.

In one 2006 study, sociologist Randal Schnoor, one of the earlier scholars to research LGBTQ Jews, found that gay Jews tended to choose one of four options: embracing a traditional Jewish lifestyle and repressing their sexualities; embracing a gay lifestyle and mostly ignoring their Judaism; switching between the two, compartmentalizing; or integrating the two identities together successfully.⁶ Overall, Schnoor found that many of the gay Jews he interviewed felt alienated from Jewish community and had fraught relationships with their Jewish identity.⁷ He also noticed that the participants in his study who managed to integrate their gay and Jewish

⁷ Schnoor, 15.
identities were generally younger and that many found LGBTQ synagogues or other similar organizations that helped them combine the two parts of their lives.\footnote{Schnoor, 16.}

Elisa Abes, who conducted a long-term study on two Jewish lesbians focusing on their experience as college students (ages 18–25), demonstrated in a 2011 article how the participants initially kept their Jewish and lesbian identities separate, considered how to reconcile sexuality and Judaism, found community, and integrated their separate identities into a connected, holistic identity.\footnote{Abes, “Exploring the Relationship.”} Although the two participants she interviewed, Leah and Beth, never believed that their Jewish and queer identities were incompatible, Beth did leave the Conservative movement in favor of the Reform movement because she did not believe the Conservative movement could accept her sexuality.\footnote{Abes, 217.} Both Leah and Beth discussed how their Jewish identity helped them accept their sexuality, as they already experienced a feeling of difference due to being Jewish.\footnote{Abes, 213, 217.} Originally, they considered their identities as lesbian and Jew to be separate but over time integrated them into facets of their overall identities.\footnote{Abes, 221.} One key point of Abes’s study to consider is that “both Leah and Beth were comfortable identifying as Reform” but that “Jews affiliated with more traditionally observant movements such as Orthodoxy often struggle to acknowledge their lesbian identity in the face of religious doctrine.”\footnote{Abes, 222.}

Historically, LGBTQ Jewish women have often been overlooked or ignored in traditional Jewish literature. The verses in the Torah that have been the basis for Jewish arguments against homosexuality, Leviticus 18:22 and 20:13, do not mention women. The earliest prohibition of lesbian marriage is found in the rabbinic midrash Sifra, which forbids imitation of the Egyptians, including the same-sex marriage practices of the Egyptians.\footnote{Sifra, Acharei Mot, 8.8.} The only explicit Talmudic discussion of sexual contact between two women says that a woman who has had sex with another woman is still acceptable for marriage, essentially declaring that sex between two women is not actually sex and should not be a major concern.\footnote{Sienna, A Rainbow Thread, 39.} Some Jewish feminists and LGBTQ activists have begun to reinterpret those sections of text in a more inclusive manner.\footnote{Alpert, “In God’s Image,” 61–70.} Others, including Plaskow, argue that authority stems from the community and not from the text, so community can be changed to be more welcoming, accepting, and diverse.\footnote{Plaskow, The Coming of Lilith, 124–27.} Even so, it is still difficult for LGBTQ Jewish women to find a place that
celebrates all parts of their identity, as exclusion happens on multiple levels.\textsuperscript{18} LGBTQ Jews may find that their sexuality or their Jewish identity is ignored in feminist spaces, and those struggling to be accepted as women in their fields may feel the need to hide their sexuality to avoid facing more adversity.\textsuperscript{19} Belonging to two different, frequently ignored groups within Judaism can easily exacerbate feelings of invisibility and difficulty finding a welcoming and accepting community.

My research focuses on LGBTQ women in one network of Jewish communities where women—LGBTQ women in particular—have not always been accepted: the Camp Ramah network, affiliated with the Jewish community’s Conservative movement. The Ramah Camping Movement includes affiliated camps across the United States (e.g., Ramah Darom in Clayton, Georgia; Ramah Poconos in Lakewood, Pennsylvania; and Ramah Berkshires in Wingdale, New York), Canada, and Israel.\textsuperscript{20} Standard Ramah overnight camps accept campers in fourth to tenth grades, and there are some specialized programs tailored to younger campers.\textsuperscript{21}

Gaining equality for women in the Conservative Jewish community happened in multiple stages over many years. Women were first counted as part of a minyan in 1973 and were not allowed to be ordained as rabbis until 1983, with the first female rabbi being ordained in 1985.\textsuperscript{22} Other rulings, including but not limited to women being allowed to serve as witnesses, lead services, and wear tefillin, were also announced by the rabbinical association in the following years.\textsuperscript{23} Though Conservative movement leaders have described the movement as gender egalitarian for several decades, it was only in 2014 that the movement’s rabbinical association approved a responsum\textsuperscript{24} declaring that women were fully and equally obligated to perform mitzvot they had historically been exempt from, stating that the historical exemption stemmed from women’s subservient place in past Jewish society. Because women are now recognized as equal to men, women are no longer exempt from performing certain mitzvot.\textsuperscript{25}

The Conservative movement’s rabbinical association first announced that it would work for equal rights for gays and lesbians in 1990.\textsuperscript{26} In 2006, the association approved a responsum that normalized the status of homosexual individuals and allowed sexual acts between same-sex couples except for anal sex between two men.\textsuperscript{27}

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\textsuperscript{18} Alpert, Elwell, and Idelson, \textit{Lesbian Rabbis}, 14–16.
\textsuperscript{20} Camp Ramah, “\textit{About Camp Ramah}.”
\textsuperscript{21} Ramah Darom, “\textit{FAQ About Ramah Darom}.”
\textsuperscript{22} Dorff, \textit{Modern Conservative Judaism}, 130, 144.
\textsuperscript{23} Dorff, 144–45.
\textsuperscript{24} A written reply by a rabbi or Talmudic scholar on the matter of Jewish Law.
\textsuperscript{25} Barmash, “\textit{Women and Mitzvot}.”
\textsuperscript{26} Dorff, \textit{Modern Conservative Judaism}, 288–90.
\textsuperscript{27} Dorff, Nevins, and Reisner, “Homosexuality, Human Dignity, and Halakha.”
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The responsum did not comment on gay marriage but did explicitly forbid bissexuals from engaging in same-sex activity, as the authors considered heterosexual relationships the ideal. In 2011, the rabbinical association extended its previous declarations to include bisexual and transgender individuals, and in 2016, the association approved a historic resolution affirming the rights of transgender and nonbinary individuals. The Conservative movement today has a welcoming stance on LGBTQ Jews, but actual acceptance frequently varies from synagogue to synagogue and rabbi to rabbi. Ramah camps are similar to synagogues belonging to the movement: how egalitarian and how accepting any camp is depends on multiple factors and is not guaranteed by the camp belonging to the Conservative movement.

I chose to study Ramah alumni because of my personal experiences at Camp Ramah Darom, the strong commitment to community that Ramah fosters, and the long-term connection to Judaism that Ramah creates. I know from my own experiences the kind of community and long-term connections that Ramah can provide, and I wanted to focus on community, how it can go right, and how it can go wrong. One of the Ramah Camping Movement’s goals is to help its campers grow socially and create long-term relationships. The social aspects of Ramah camps are what tend to be retained long-term, and Ramah camps generally have a healthy social atmosphere, with a minimal amount of bullying and other social issues. Another goal of the Ramah Camping Movement is to strengthen Jewish identity and create a lifelong connection to Judaism. A study of long-term Jewish involvement in Ramah alumni found that those who went to Ramah camps tended to continue practicing Judaism and stayed involved in Jewish community. I wanted to talk to LGBTQ women who were involved in Jewish community and had a strong sense of their Jewish identity, and Ramah alumni filled that criteria.

Methods

For this study, I interviewed eleven individuals, soliciting participation by snowball sampling: I began with individuals I knew personally, and at the end of all but the last interview, I asked the participants if they knew anyone else who was a suitable subject and might be willing to be interviewed. All of my participants were between the ages of 18 and 20 and had attended a Ramah camp for at least one summer. Almost all of the participants attended either Ramah Darom or Ramah Poconos, with the exception of one individual, who attended Ramah Berkshires as a camper and spent one year on staff at Ramah Poconos. Nine of the eleven participants identified as

29 Human Rights Campaign, “Stances of Faiths on LGBTQ Issues.”
30 Kress and Ben-Avie, “Social Climate at Ramah.”
31 Camp Ramah, “About Camp Ramah.”
32 Cohen, “The Alumni of Ramah Camps.”
women; one identified as nonbinary (they/them); and one identified as agender (they/them, she/her, he/him). The nonbinary and agender participants were either regularly grouped with women while at Ramah or identified as women during their time attending the camp.

I used a semistructured interview format, with a set list and order of questions that I deviated from to pursue lines of inquiry that came up during the interviews. I asked about the participants’ experience at Ramah, their experiences in Jewish community, and their impressions of Jewish tradition, among other topics. Questions included the following:

- Looking back on your experiences at Ramah, what are your impressions of Ramah’s approach to gender? What are your impressions of Ramah’s approach to sexuality?
- Are there any ways in which Ramah could do better with respect to issues of gender or sexuality?
- How important is it to you that all aspects of your identity are recognized and accepted by any community you participate in?
- What aspects of Jewish tradition do you find uncomfortable?
- Have you had experiences with aspects of Jewish tradition that were disparaging toward women or LGBTQ people? Did you ever have experiences like that at Ramah?
- Who do you think has the authority to change Jewish tradition?

To protect the personal information and confidentiality of the interview participants, all names used here are aliases.

Community and Connections at Ramah

At Ramah, participants had a mix of experiences regarding gender and sexuality, ranging from near-complete acceptance to experiences marked by discrimination. Community connections, personal relationships, and the interactions with other campers were crucial to their Ramah experiences; a positive experience with community was integral to a positive overall experience. Participants reported that relationships formed at Ramah tended to be longer-lasting, closer, and more able to withstand periods without contact. When talking about her friends from Ramah, Lily, who was a camper for three years and a staff member for one year, explained, “Despite that distance for ten months of a year, those are some of the closest friendships and relationships that I’ve had in my entire life, [despite] having only known these people for two months at a time for a few years. It goes to show how important these friendships have been to me.”

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33 Interview 9, April 28, 2020.
Ramah is excellent at fostering long-term connections between people and creating a common sense of identity that can last for years even if not purposefully maintained. These long-term interpersonal connections are a large part of what helps Ramah create long-term connections to Judaism. Gracie, who attended Ramah Darom for four years, explained that at Ramah, “people in general come together and sing the same words, even though we’re from different places. To know that people with such different backgrounds… [are] able to have the same connections. It’s just really inspiring. It makes you want to continue to feel a part of that community.”

Such discussions of the importance of community at Ramah make sense in light of the ways that most participants discussed the importance of community in their lives. Many interviewees highlighted the importance of community in multiple parts of their lives, and Ramah was frequently described as a place where participants felt especially accepted. A number of participants also grew up in or had affiliations with Orthodox communities, however, and they often contrasted feelings of acceptance at Ramah with experiences of alienation in Orthodox communities.

Gender Dynamics at Ramah and Beyond

Most participants did not have any concerns about gender dynamics at Camp Ramah. Participants reported feeling comfortable in groups of any gender makeup, with the determining factor in how safe they felt being if their closer friends were in the group. Rachel, a nineteen-year-old bisexual, talked about how “I had groups of people I would flock to depending on how the groups were set up… There were things I felt more comfortable saying [in smaller groups] than I did with everyone, but that was just because that’s a personal thing because I’ve got… some people in the [larger group] I didn’t like expressing myself to.”

Most other issues with group makeup were similarly linked with social anxiety or personal relationships, and gender came into play only because small-group activities at Ramah are often gender-segregated. With regard to the treatment of males and females, no participants noticed or remembered any particular religious discrimination or uncomfortable traditions regarding gender. In their experience, Ramah wholeheartedly embraced the gender egalitarianism affirmed by Conservative movement leadership; however, when specifically prompted to talk about her treatment as a woman at Ramah, Gracie explained that the boys in her age group, sometimes even the counselors, behaved very poorly toward the girls and it was not addressed properly. Anna, who dealt with a lack of religious egalitarianism in her home community, explained that while structured religious activities at Ramah were egalitarian and felt comfortable, some personal interactions and relationships at Ramah were nonetheless affected by sexism: “I think that even though it’s a religiously

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34 Interview 6, April 23, 2020.
egalitarian place, it still suffered from secular misogyny.” Still, in general, participants had few concerns about gender at Ramah.

When participants spoke of discomfort with gender roles in Jewish communities, they pointed not to Ramah but to practices found within Orthodox settings. The concerns that they raised about feeling uncomfortable and sidelined in community were the sorts of concerns that many Jewish feminist activists, including Rachel Adler and Judith Plaskow, have discussed, relating to how Orthodox Jewish law and tradition are based around the idea of women as the Other. When I asked them about traditions that bothered them, almost every participant spoke of either Orthodox gender roles or the presence of a mechitzah, a physical barrier separating women from male prayer spaces. Sarah, whose family goes to Orthodox services semiregularly, was vocal about feeling uncomfortable in places where men and women are divided for prayer. As she put it:

I don’t feel uncomfortable as a queer Jewish woman, I feel uncomfortable . . . just feeling a little like a second-class citizen and having a dress code, having to wear skirts . . . covering your knees, having to wear shirts past your elbows, and . . . sitting in the back, or up in a balcony when you’re in an Orthodox Jewish synagogue, I just, I hate it, and at all those times I feel like I just want to rebel.

For Sarah, the experience of divided prayer was incredibly uncomfortable, making her feel as though she did not belong in the community and that she was diminished, lesser. Sarah felt wronged and angry because of this treatment, as she knew she should be allowed to participate fully in the community, a model of participation that she experienced at Ramah.

Sasha, whose family attended a Chabad synagogue, shared her experience with the difference in perceptions of that community between her and her dad. She noticed that the men prayed and were “having a good time [while] the women are watching children. . . . [My dad] didn’t understand my experiences. . . . Our experiences within that community were very different.”

The gap between the experiences of men and women was noticed by multiple participants, all with references to Orthodox communities.

Some participants with experiences in Orthodox communities also noted that the standard set of expectations for Jewish women in those communities was difficult to handle. Coming to terms with the gap between what you desire and what the community expects you to be is very difficult. Anna relayed her frustrating experiences growing up in an Orthodox community:

38 Interview 1, April 3, 2020.
39 Interview 4, April 8, 2020.
As someone who wants to be considered smart and strong-willed and wants to have the same access that men would have, the Orthodox understanding that the laws don’t really allow for that was really difficult. . . . The idea of “This is what a Jewish woman looks like, this is what I’m going to be, and this is the ideal” certainly is not nearly as bad as it used to be, but it still can be very frustrating.⁴⁰

Anna had similar issues as Sarah: the feeling of not being allowed full access to the community, and of separation and discomfort. Like Sarah, Anna also believed that she should be allowed full access as herself while living her life the way she wanted to live it. In contrast to the near-universal complaints about being a woman in the Orthodox Jewish community, the difficulties with gender at Ramah were very minimal. At Ramah, binary gender was not an issue that caused difficulty fitting into community.

Those outside the gender binary did, however, raise additional concerns regarding gender at Ramah. Ramah frequently has gender-segregated activities, and all campers sleep in gender-segregated bunks or large communal living areas. Both campers and staff live together in a bunk, and the individuals who live together in a bunk also tend to have camp activities together. With that frequent gender division, it can be difficult for a nonbinary individual to feel comfortable and fully accepted. Ellie, who is nonbinary, explained how gender divisions at Ramah made things uncomfortable:

There were points where it was awkward because I was in a girls’ bunk. I was a CIT for girls’ bunk. I lived in a girls’ bunk this past summer when I was working, as a live-in [counselor]. And that was kind of a sticking point, I’d say. But then again, it was just me, so there’s nothing that they could have done to make an accommodation because you can’t really accommodate one person.⁴¹

While Ellie felt discomfort regarding Ramah’s handling of their situation, they felt it was unfair to ask for change for just one person. In contrast, Anna, who has a nonbinary family member, argued that as more people come out as nonbinary and it becomes a more common part of living in this world, Ramah needs to change to keep up with the times and consider having gender-neutral bunks. Anna felt empowered to change the way Ramah handles nonbinary individuals and was certain that Ramah should change for them because nonbinary individuals must have a place in community.

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⁴¹ Interview 7, April 26, 2020. CIT: counselor in training.
Experiences with Sexuality in Ramah Communities

The responses with regard to community at Ramah and sexuality generally fell into two camps. The most meaningful and memorable parts of Ramah were linked to community and how accepted the participants felt in the community at Ramah. About half of the participants described Ramah as incredibly welcoming and accepting, and as an excellent place to explore their sexuality. Sasha, a queer woman who was out at Ramah, was one of them, saying,

Without my amazingly supportive friends from Ramah, some of whom are also members of the LGBTQ community, I can’t say that I would have figured [my sexuality] out that quickly. Just having a supportive community of people who loved me was really, really great. And yeah, I guess… just figuring out these parts of myself within the Jewish community sort of helped me to tie both of those identities together.\(^{42}\)

Sasha felt fully accepted in Ramah’s community and never had doubts that she belonged there or that she could fully be herself there. Not every participant who found a welcoming community at Ramah was quite as effusive about their friends from Ramah helping them discover themselves, but in general, they considered Ramah a place of support and had no doubt that they would be accepted at Ramah. Gracie, for example, throughout my interview with her frequently referenced Ramah as one of the communities she felt safest and most welcome in. “I think Ramah was technically the first place I actually came out,” she told me. “I remember having some struggles at home [with being] accepted… [A] Ramah counselor… talked to me before I went home, and he really helped me.…” Later, he] continued to meet with me, give me resources, and that’s what Ramah did for me. And I’m so thankful for that.\(^{43}\)

The staff and campers at Ramah created a supportive community that Gracie could rely on, and a place where she could feel safe and accepted. Gracie felt welcomed and accepted at Ramah, took that to be standard for what community should offer, and recognized the discrimination she faced elsewhere as the unusual situation. Gracie was confident that she belonged at Ramah and could belong in other Jewish communities elsewhere.

In contrast, some participants found a few close, supportive friends at Ramah but faced discrimination from the rest of their age group. Nora, a lesbian from Georgia, told me that her sexuality and coming out at Ramah “changed some of the interactions with other people at camp who weren’t necessarily outwardly homophobic but just kind of didn’t get certain things”\(^{44}\) and made previously easy social interaction awkward and mildly uncomfortable. The discrimination that Nora and others faced was generally mild, and not significant enough that they felt the staff should have done

\(^{42}\) Interview 4, May 8, 2020.
\(^{43}\) Interview 6, April 23, 2020.
\(^{44}\) Interview 8, April 26, 2020.
anything, but it still made Ramah feel less safe and comfortable. Interestingly, no matter their experiences with community at Ramah, all but one participant mentioned that they would not hide their sexuality at Ramah if they returned. Nora and the other participants with experiences like hers did not find Ramah to be the safe and welcoming place that it has the potential to be, but they felt that they could belong there, and they returned for multiple years as campers and staff members. They believed they had a place in Ramah’s community and that they could make the community a better one.

A number of the participants mentioned that they would have appreciated having facilitated discussions about sexuality at Ramah, rather than just talking about it on their own. Ramah already holds discussions about a variety of topics, including those that are controversial or very personal, and it would be welcome for staff to encourage campers to discuss sexuality and gender. Lily, who attended Ramah Poconos, said, “I think… communication is one of the biggest things, and not only… between the staff and the campers but also just to make sure that dialogue from camper to camper is respectful and open.”45 Discussions at Ramah happen in different groups and have different levels of staff involvement. Activities held with only a camper’s bunk tend to be personal, and while the counselors provide the space and structure to have the discussion, the content is mostly based on the campers. The goal there tends to be creating community and friendships, and getting to know other campers better. Other discussions involve the whole age group, with topics selected more carefully by the counselors. Sometimes an expert is brought in and the discussion will be less personal, more guided, and more focused on issues in the wider world and the Jewish community. The goal of those discussions is generally to increase the campers’ knowledge and give them multiple perspectives on a single issue. Participants suggested that both types of discussions would be helpful, with the more intimate discussions giving LGBTQ campers the opportunity but not the obligation to talk about themselves in a safe space and the larger group discussions teaching every camper about the LGBTQ Jewish community.

One of the participants (Emily), however, raised the point that Ramah is in part an early education facility and that although younger children should not be prevented from learning about the LGBTQ community, they may be too young to discuss these topics with the gravity the topics deserve, though in the older age groups, discussing different sexualities is certainly appropriate and relevant. Anna and Ellie both mentioned the fact that in older age groups, there is a “hookup culture.” Anna, who is asexual, talked about how, “when you get older, [there were] more hookups. It just was always so… sexual, because… for a lot of kids, that’s what happens naturally. But when you are not sure you feel that way, you feel very much out of place.” Participants felt that talking about the variations in sexuality and gender identity that exist would

assuage any feelings of being out of place and would make campers safer and more comfortable.

When I asked participants about concerns related to gender and sexuality at Ramah and in Judaism as a whole, most concerns that came up around Ramah were about sexuality, and most concerns about Judaism as a whole focused on gender. This could be due to my phrasing of interview questions and the context in which they were asked, but even when I asked specifically about experiences with gender at Ramah, relatively few concerns were raised, as discussed above. The main topics that came up were transgender issues and issues with the gender binary. By contrast, issues with sexuality at Ramah were more frequently discussed than those in the other Jewish communities, but there were still some difficulties with acknowledging sexuality in the Jewish community.

The complaints that participants had about sexuality in the broader Jewish community were different from those about Ramah, focusing on invisibility or a lack of acknowledgment rather than on interpersonal issues. For one, the overlap between gender and sexuality can make feeling visible in community more difficult. Jenna, a bisexual who grew up in a Chabad community, shared that even getting an answer about why homosexuality for women is considered wrong can be difficult and alienating:

Growing up in a Chabad community, being a woman, I often felt overlooked. And then, on top of that, sexuality, because not only is there a belief that homosexuality is wrong, but then it gets more complicated because for women, it’s not stated that’s wrong in the Torah, it’s explained to mean that it’s wrong because the Egyptians did it. And, it’s just no one . . . gives you a straight answer; they’re just like, you know what it says.  

Jenna felt that she should belong in Jewish community, and was excluded on a basis that was not even properly explained. The sense of invisibility brought about by this was very discomfiting.

Another common difficulty with uncomfortable Jewish traditions surrounding sexuality was a feeling that there are no traditions, or no history, for those who are not straight. As Gracie put it, “Jewish tradition assumes that gay people don’t exist. Most of . . . Jewish tradition bases around a man and a woman. So, there is no existence of me.”

The gap in history and traditions that apply to the queer community is also a separation from community, and an exclusion. The sense of the weight of history is a large part of feeling connected to Jewish tradition, and to be excluded from that can feel as though any acceptance in community is provisional at best. At Ramah, the issues with sexuality tended to be discrimination or a lack of understanding from

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46 Interview 10, April 29, 2020.
47 Interview 6, April 23, 2020.
other campers, rather than feeling invisible. Issues with others’ reactions to homosexuality were more commonly mentioned as an issue at Ramah than an issue in the wider Jewish community.

The Importance of Community

Several of the participants defined Jewish tradition in terms of community and emphasized how connections and relationships with others kept them involved as a part of Judaism. This theme was very present in participants’ descriptions of Ramah and how Ramah influenced their connection to Judaism. A common idea was that Jewish tradition is a connection between you and others in the present, and you and ancestors in the past. Gracie explained:

[Jewish tradition] is something to be kept. Just because of how many generations have done the same thing over and over. It’s a way to feel connected to the people that came before you through physical action. That’s what’s great about it, that it’s an actual physical, like you have to do something, it’s [a] reminder of how you are Jewish.

Feeling accepted and safe in the communities you belong in is incredibly important and is extremely relevant to having a positive experience in Judaism. Most participants explained that feeling accepted in a community—any community—was very important and often determined whether they would remain in that community at all. Ellie firmly stated, “I’m not going to participate in an anti-Semitic queer community, just the same as I’m not going to participate in a queerphobic Jewish community. I’m not going to do it. . . . If I don’t feel welcome, I’m not going to stay.”

Remaining in a place that makes you feel unsafe is difficult, and most participants would not force themselves to do so. If Jewish communities don’t welcome those with diverse identities, those people will not make themselves smaller in order to belong. Most participants do feel accepted in their Jewish communities, however, and some participate very regularly.

Participants frequently mentioned that it was welcome when they felt safe enough to be open about their sexuality. Coming out can be difficult and scary, and it leaves a person open to negative reactions. A common thread among interviewees was the idea that they did not regularly reveal their sexuality, leaving it in the dark almost as a default. Rachel, an outspoken bisexual, explained, “So it’s more like ‘if you ask, I’ll tell you,’ but I’m not gonna just put it out there, cuz I don’t feel the need to do that.” Other participants agreed with Rachel, expressing that they did not feel it was necessary to come out and that it was easier not to share.

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48 Interview 7, April 26, 2020.
49 Interview 5, April 16, 2020.
Others, such as Ellie, a pansexual nonbinary, had different reasons for keeping quiet. Ellie opened up about how talking about their gender identity was difficult because they “didn’t want to have to come out over and over and over again, and have people ask questions.”  

Another participant, Anna, who is asexual, had a similar reason for hiding her sexuality. She explained that asexuality is “certainly not the thing that a lot of people have heard of; a lot don’t even believe it if they have heard of it. So, if you are heteroromantic asexual . . . it’s really easy to hide.”

Given all of these difficulties, being in a space where they feel safe and welcome enough to open up about their sexuality is very important and meaningful. Most participants had at least one community or group of people they felt comfortable opening up to, and many had come out in their Jewish communities. Several participants, including Sasha, Ellie, Nora, and Rachel, came out at Ramah while they were campers there. Coming out in Jewish community and at Ramah indicated that participants do feel safe, comfortable, and welcomed at Ramah and in their Jewish communities at home.

A major factor in feeling comfortable in a community was having commonalities with the other people in that community. Several participants mentioned feeling more comfortable and more likely to come out in communities that were mostly composed of younger participants. When asked about commonalities between communities she feels comfortable in, Gracie said, “Maybe . . . this generation is a little bit more open and accepting than the previous generation. I think it’s an age thing.”

Having an easily recognizable commonality between members of the community can make it easier for participants to feel safe and to open up about their identities. Sasha, a queer woman, discussed how she sought out spaces with other women and younger participants because she felt more comfortable there and had more in common with other members of those communities. As she put it, “When you’re young and everything is scary, and identifying as different groups is new, having other people who are your age and who identify similarly to you is nice.”

The sensation of connectedness and a base level of commonality also showed up for multiple participants with regard to Jewish communities. Sasha and Rachel both talked about how being part of clubs that coincidentally had a large number of Jewish women and queer Jewish women made them feel very welcomed, safe, and included. Ramah represents a community in which the members have many commonalities. At Ramah, campers tend to interact mostly with others their own age or close to it, and all campers are Jewish. These factors are part of what made Ramah a welcoming community to the interviewees.

50 Interview 7, April 26, 2020.
52 Interview 6, April 23, 2020.
53 Interview 4, April 8, 2020.
The importance of acceptance within community is also evident in the reasoning for why discovering their sexuality did not significantly change participants’ impressions of Judaism or Ramah. Although the reasoning varied greatly, the most common was that they were not worried about being excluded. Participants already had the sense that they belonged in Jewish community and that there was space for them within their community. Mary talked about how they knew that “my synagogue is also pretty supportive of [the LGBTQ community],” so figuring out their sexuality and gender identity did not change how they thought about Judaism. When asked about sexuality and her thoughts about Ramah, Sasha said, “Having a supportive community of people who loved me was really, really great,” and that she never doubted her place in Ramah’s community. Sasha did not change how she perceived Ramah because she had no need to.

Belonging in Community and Personal Empowerment

Despite all of the ways that participants could feel unwelcome, they generally had a strong sensation of belonging in Jewish community. Even if certain communities had felt uncomfortable or unsafe, participants knew that they belonged in the Jewish community as a whole. Nora talked about how the “idea that you can be Jewish and LGBT has always kind of been something that I understood.” In general, participants felt very accepted and safe in their home synagogues or other Jewish communities, including Ramah. All but two of the participants currently felt no conflict between their gender, sexuality, and Judaism as a whole, and most had never felt any conflict at all. Ellie mentioned, “So for me, there was never a moment where I was like, wait, I didn’t know that you could be Jewish and gay.” This is a great contrast to the common trend within earlier writings by queer Jews, in which they frequently discuss the feeling that their sexuality is wrong, or the necessity of choosing between Judaism and their sexuality.

The idea of not feeling any conflict in being Jewish and queer also applied to the participants’ feelings around representation. Many felt that representation was welcome but was not necessary for them to feel connected to the Jewish community and its history. Sarah explained this with an analogy to physics, her college major: “I studied physics … and there haven’t been a lot of female physicists, and I still think a lot of the male physicists did some really cool stuff. And I think they’re really cool, and I still want to go into physics.”

54 Interview 2, April 5, 2020.
55 Interview 4, April 8, 2020.
56 Interview 8, April 26, 2020.
57 Interview 7, April 26, 2020.
59 Interview 1, April 3, 2020.
The idea that representation was a welcome and exciting bonus was echoed by many other participants as well. This is not to say that representation should not be encouraged or that it does not need to be discussed at all, just that it was not required to foster a sensation of belonging in community. All participants agreed that it would be worthwhile and meaningful for Ramah to include queer female representation, modern or historical, as part of their experience. One caveat that Anna brought up around queer representation was that queer role models should not be interpreted into existence, or excavated. She explained:

I want to acknowledge that yes, the Torah lacks representation of me. It lacks representation of me, of people like me, and it lacks that awareness. And I think that if we pretend that awareness is there, we kind of ignore a bit of the problem. And at the same time, why don’t we go forward, acknowledge that we have a new awareness of queer people, or women having rights and education. And with that, move forward to create a Judaism that works for today but it’s... still compliant with Jewish law.\textsuperscript{60}

Anna was especially in favor of representing modern queer figures, especially queer Jewish women, but felt that while representation is important and welcome, it should not be used to ignore the gaps that exist. Anna’s opinion was an interesting contrast to the other participants’ and stood in tension with the efforts by Jewish feminist and queer activists to uncover role models and to reinterpret texts in more inclusive ways.\textsuperscript{61}

Other participants stressed that it was reassuring and inspiring to have role models they could identify with. Emily, a lesbian, talked about her college rabbi, who is married to another woman, saying that “seeing [her rabbi], in the position that she’s in, was definitely super-helpful because, you know, she is a gay woman who is a rabbi, which is so cool…. She’s sort of just a calming presence.”\textsuperscript{62} Emily enjoyed having others like her around and in visible positions, as well as knowing that others like her exist in the world, but her sensation of belonging was not conditional on representation. Additionally, almost every participant said that it would have been beneficial and meaningful for Ramah to discuss historical and modern queer Jewish figures. Representation simply makes it easier to know that you are not alone and that you belong in community.

In general, the participants in this study felt that they belonged in Jewish community and that their sexuality was not at odds with most Jewish communities. Some participants also felt empowered to change Jewish community and tradition. A common response to the question about who holds the authority to change Jewish

\textsuperscript{60} Interview 11, May 20, 2020.
\textsuperscript{61} Shapiro, “Lie With Me”; Hirsh, “In Search of Role Models”; Raveh, Feminist Rereadings of Rabbinic Literature; Goldstein, The Women’s Torah Commentary; Alpert, Like Bread on the Seder Plate, 46–52.
\textsuperscript{62} Interview 3, April 7, 2020.
tradition was that tradition is personal and you are in control of how you practice religion. Emily explained, “I think religion is highly personal. And anybody can look at what the Torah says and say, ‘This is how I’m going to live my life, and I think God would be okay with that.’ … I definitely think every individual person has the power to decide how they interpret everything. … I think we can all make our own studies and draw conclusions.”63 While some participants indicated that rabbis, the Conservative movement’s rabbinical organization, or other authority figures were necessary for changing tradition, especially on a community level, many believed they could change and control their own personal traditions.

Another common theme was that the new generation is especially empowered to change tradition: “As the next generation, we are responsible for changing things. If and when they need to be changed … it’s the responsibility of our generation.”64 This idea was echoed in many different interviews. Many participants acknowledged a gap in the history of LGBTQ Jews, and the space that needs to be carved out to create an improved community and tradition. Emily argued, “Something that our generation can do a good job of is forging that path for our children and our grandchildren.” Many participants believed that change can happen now, in their generation, and could be spearheaded by them; they don’t need to wait for change to happen, or to argue so someone else should cause change. In this vein, Jenna believed that simply acknowledging that “there are a million different kinds of people, and a million different kinds of identities in every sense of the word, and that they exist in every community”65 will help to create change in the world. Rachel agreed with this idea and mentioned that she felt as though she were changing her community through living openly as herself within it, even if it was only in small ways.

The concept of being empowered to change tradition was also included in many of the participants’ definitions of Jewish tradition itself. Several mentioned the importance of questioning as a part of Jewish tradition. Nora explained, “The fact that there is so much variation and so much room for debate, for pushing the envelope, or for questioning things has always been a huge part of [Jewish tradition] for me.”66 Others talked about how they felt uncomfortable with those who accepted the word of Torah as written without question, or the word of a rabbi as the only possible authority, and how they would generally avoid spaces where they felt that was the case. Emily talked about how it felt exclusionary and made her uncomfortable, saying that she feels uncomfortable with “anything talking about super-literal readings of the Torah, or the very, very old traditions … feeling [that] the literal words in the Torah are what should guide our day-to-day behaviors—I’m not part of that. That does not include me,

63 Interview 3, April 7, 2020.
64 Interview 10, April 29, 2020.
66 Interview 8, April 26, 2020.
you know. So I think being able to interpret things more loosely is a good way to include more people."67 Emily’s ideas about the importance of community showed up in many other interviews. Even while participants stressed the right of individuals to determine the shape of Jewish tradition, their definitions of Jewish tradition included a welcoming and diverse community.

The sensation of being empowered to change community and tradition also extended to Ramah. Anna, who had been a staff member, discussed how she attempted to create a safe space and to be welcoming to other queer campers she encountered. “Camp is supposed to be a safe space for these kids,”68 she explained. She felt that Ramah should be a welcoming, safe community and that not enough effort was being put forth to create that kind of haven. In contrast, Ellie argued that change has to come from the campers, not from the administration or counselors. In response to my question about how Ramah could do better with regard to gender and sexuality, they stated, “I think that [change] has to come from the campers, just to be open to listening to it.”69

Anna, along with other participants who had been staff members, argued that Ramah should provide more staff training on the topics of gender and sexuality. Not all of them were bunk staff, so they did not all receive the same training, but most mentioned that they did not feel that the staff training around the subject of sexuality and gender was sufficient. Mary, who was a staff member at Ramah Darom, mentioned that without training, it can be difficult to feel prepared to support a camper who comes out to you. Jenna, who was a specialty counselor rather than a bunk counselor, argued that it was important for every staff member to receive training on the topic of sexuality and gender, as every counselor interacts with the campers in some way and sexuality can be a very sensitive issue that is easy to get wrong, accidentally hurting someone:

It’s important that everyone hears that, and not just the counselors, because even specialists . . . interact with the kids, so much. And it leaves a lot of room for misunderstanding and for people to be uneducated on the topic and end up unintentionally negatively impacting a camper.70

From her perspective, more in-depth staff training would help counselors feel prepared and could make Ramah a safer and more comfortable place for campers. Anna explained how in her time as a staff member, “I tried to create [a safe space] at camp. . . . Camp was supposed to be a safe space for these kids,”71 but she felt as though

67 Interview 3, April 7, 2020.
69 Interview 7, April 26, 2020.
70 Interview 10, April 29, 2020.
some other counselors acted in potentially damaging ways. More training and discussion around the subject could help with that as well.

Not every participant, or even every participant who was on staff, agreed with the recommendation of further staff training, however. Ellie argued that changes imposed from above would never work long-term and that moving to a more accepting environment has to come from the campers. A common theme among participants, mostly those who had not been staff, was that there wasn’t anything they would have wanted the staff to intervene on, even if they had negative experiences. Even when directly prompted, participants did not report anything they felt the staff should have done. More staff training could give Ramah staff the context for intervening in a helpful manner, but it could also give them the tools to stay out of more minor issues and let the campers figure out what they need.

Ellie also shared the story of holding a Q&A session for the rest of their age group when they came out as pansexual nonbinary at Ramah. They did explain that it was only to prevent awkward and uncomfortable conversations later but that it was mostly successful in creating a more knowledgeable and accepting community. The other campers changed their behavior to better reflect Ellie’s gender identity, at least to Ellie’s face. Nora, who went to a different Ramah camp, also held a Q&A session with the other people in her age group and had a positive experience doing so. She talked about how she and her friends “decided to have a little LGBT Q&A. We sat...in the center of a circle, and everyone’s just asking questions, and it was really nice, actually, and felt very accepting.”

Talking about sexuality and being willing to answer questions demonstrated that Nora and Ellie felt safe and comfortable enough to be open about their gender and sexuality, and also that they wanted to increase others’ understanding of the issues.

Conclusion

The individuals I interviewed felt accepted at Ramah and in the larger Jewish community and did not feel limited by either their sexuality or their gender. They felt empowered to change their communities and their surroundings, and some of them acted to improve their communities. In contrast to many of the Jews discussed in Schnoor’s research, they did not feel that being queer and being Jewish were mutually exclusive. Whereas Schnoor found that a significant portion of participants in his study chose to ignore their Jewish identity and embrace a queer lifestyle or vice versa, none of the participants in my study considered blocking off a part of their identity. Similar to the participants in Abes’s study, they were working toward

\[72\] Interview 8, April 26, 2020.
\[73\] Compare my conclusions with those of Schnoor, “Being Gay and Jewish.”
\[74\] Schnoor, “Being Gay and Jewish.”
integrating their Jewish and queer identities and did not consider their identities to be mutually exclusive.\(^\text{75}\)

To the participants in this study, it was completely normal to be LGBTQ Jewish women; however, even though they felt accepted in general, they still experienced instances of discrimination and alienation. They experienced problematic expectations and limitations for women in Orthodox Jewish communities, and they saw a lack of representation and recognition of LGBTQ Jewish figures, as well as some discrimination, in both Conservative and Orthodox settings. Even so, the experiences of those I interviewed demonstrate that Jewish community is becoming more accepting and welcoming to LGBTQ Jews and that the Ramah Camping Network is a part of this process. As mentioned above, one of Abes’s participants, Beth, stopped identifying as a Conservative Jew because she did not believe she could be properly accepted in the Conservative Jewish community.\(^\text{76}\) In contrast, those I interviewed continued to belong to the Conservative movement and experienced a similar or greater level of acceptance than Beth and Leah felt in the Reform Jewish community. Even if they experienced discrimination, many of the participants believed that they could change their communities for the better, and remained.

Overall, the participants in this study felt welcomed in Jewish community and found places where they were accepted. They also felt empowered to change the communities they were part of for the better, making the places they spent time in safer and more diverse. Their views on authority in Judaism and Jewish tradition itself fit with a Judaism that would welcome them and was more diverse, and most were confident in the fact that they belonged fully in Jewish community. Although the individuals I interviewed were not always accepted and did face discrimination and uncomfortable situations, they faced much less than many Jews discussed in earlier literature. Ramah provided an excellent example of the potential for a welcoming and accepting Jewish community and an example of how community can be made more welcoming and affirming.

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\(^{75}\) Abes, “Exploring the Relationship.”

\(^{76}\) Abes, 217.
References


AN ONLINE SLEEP HYGIENE INTERVENTION FOR A MEDICAL UNIT OF U.S. ARMY RESERVISTS

SHELBY DUESSEL, HALEY BYLINA, HAILEE BAER, TRUMAN STATE UNIVERSITY
MENTOR: CAROL COX

Abstract

Sleep issues and their relationship to health and operational effectiveness problems are a growing concern for those serving in the military. In this small study, all 23 members of a U.S. Army Selected Reserve medical unit participated over one month in an online sleep hygiene intervention. Participant sleep quality and sleep duration before and after the intervention were measured using a pre-post assessment design utilizing the Pittsburgh Sleep Quality Index (PSQI). Although no change in pre-post total PSQI scores was found, there was a statistically significant (p < .05) increase in participants’ self-reported number of hours slept per night. This change over time suggests the online sleep hygiene intervention may affect number of hours slept per night over a monthlong period.

Key words: sleep, sleep hygiene, military health, online intervention

Introduction

The prevalence of sleep disturbances and sleep disorders (e.g., insomnia, sleep apnea) for military service members is a growing concern. Sleep disturbances have previously been associated with a variety of physical and mental health problems, including stress disorders, injuries, poor work performance, and other combat-related health concerns (Troxel et al., 2015). This is especially applicable for those service members with more combat exposure (Plumb et al., 2014). Deployments are negatively associated with proper sleep quality (Spelman et al., 2012). The physically and mentally demanding operational culture, along with irregular sleep schedules, loud noises, and personal anxiety, is not conducive to optimal sleep. Environmental demands are also associated with military service. A lack of knowledge of and training about sleep hygiene at higher levels of leadership may therefore contribute to a culture unsupportive of optimal sleep (Troxel et al., 2015; Wesensten & Balkin, 2013). Specifically, work tempo, schedules, rigorous training, a warrior culture, and combat exposure all have been identified as workplace demands associated with sleep problems in military personnel (Shattuck & Brown, 2013).

Active-duty service members and veterans are more likely than non-service members to report sleep problems (Chapman et al., 2015). Even post-deployment,
sleep problems including such issues as insomnia, nightmares, sleep apnea, short sleep duration, and daytime fatigue may continue for prolonged periods of time (Troxel et al., 2015). Studies examining post-deployment service members have reported sleep problems in 90% of participants, with insomnia and sleep apnea the most common diagnoses (Mysliwiec et al., 2013; Plumb et al., 2014). Enlisted members and those on active duty were more likely to report sleep problems (Mysliwiec et al., 2013; Plumb et al., 2014). Poor sleep quality has been shown to be related to poor mental and physical health characteristics such as low socio-emotional health status, sedentary lifestyle, overweight, and poor diet in Army Active, Guard, and Reserve members (Lentino et al., 2013). The Department of Defense has a variety of strategies (e.g., sleep assessment, educational programs, and medical referrals) to address the problem and improve sleep in military personnel and has developed the Army Performance Triad, a program that positions sleep on the same level of importance in the wellness equation as physical activity and nutrition (Troxel et al., 2015). Although sleep has been identified as a significant health issue in military personnel, however, a limited portion of wellness and stress-management training is focused specifically on sleep. There is a need for evidence-based sleep-disturbance-prevention programs for the military population (Troxel et al., 2015).

Sleep treatment options may include drug therapy, but non-drug therapy options may have longer-lasting effects and fewer side effects. Cognitive behavioral therapy has shown promise in treating insomnia, regardless of whether it is delivered online or face-to-face (Phelps et al., 2017; Seyffert et al., 2016; Zachariae et al., 2016). Other behavioral approaches, such as sleep hygiene education interventions, have been indirectly associated with sleep improvements in a clinical setting (Irish et al., 2015; Phelps et al., 2017). Sleep hygiene education interventions utilize mental training skills, such as meditation and imagery, to improve health outcomes (Elwy et al., 2014). This sort of intervention is not uncommon in a military setting, has been useful as a prevention or treatment tool for mental health issues, and has demonstrated some evidence of effectiveness in treating pain and drug-abuse disorders post-deployment (Khusid & Vythilingam, 2016; Thomas & Taylor, 2015). In a systematic review, sleep hygiene education interventions have demonstrated some positive outcomes on sleep quality (Neuendorf et al., 2015).

Sleep hygiene education has previously been used with military personnel (Nakamura, 2015); the participant is asked to address the thoughts causing his or her stress, as well as the associated physical reactions, to help better regulate and manage those reactions (Gallegos et al., 2017). This approach has demonstrated some efficacy in decreasing self-reported stress symptoms and sleep problems for military personnel (Nakamura, 2015). The intervention also has shown similar outcomes upon follow-up when compared to pharmaceutically based treatment for sleep problems (Lipschitz et al., 2016). As such, resources are becoming available for implementing such programs online. SleepSTAR, an online sleep hygiene program, provides
education and strategies for sleep management and has demonstrated effectiveness in reducing sleep problems. The SleepSTAR website is equipped with interactive tools including sleep assessments, educational content and videos, behavioral-change exercises, and stress-reducing techniques. Specifically using SleepSTAR as the sleep hygiene educational intervention, adult participants in one study significantly decreased sleep disturbances (Lipschitz et al., 2014).

Given the need for evidence-based sleep treatment programs for military personnel, and the growing support for sleep hygiene education as an effective strategy in improving sleep quality and duration, the current study describes the implementation of an online program designed to increase sleep quality and duration that was delivered to a group of Army Reservists. Reservists, about half of the military’s strength today, are frequently deployed to combat zones. Post-deployment, they must return to civilian life and face similar outcomes as those who are enlisted full-time (U.S. Army Reserve, n.d.).

Many Reservists in the small unit anecdotally reported poor sleep habits and complained to their commanding officer about constant fatigue. The commanding officer therefore invited community health educators to design and deliver an hour-long sleep hygiene education program, including lecture and instruction in an online intervention using the SleepSTAR website, to the Reserve unit during their Triad training session over a drill weekend. The U.S. Army Reservists’ sleep quality and duration were measured immediately before and one month after participation in the intervention.

Methods

Participants

Participants were a convenience sample of Army Reservists serving in one U.S. Army Selected Reserve medical unit in a Midwestern state. The commanding officer of the unit required all Reservists to attend a sleep hygiene presentation as a formal part of their battle assembly and drill weekend training. As a specialty medical unit in a rural area, membership was kept generally small; the 23 Reservists in attendance, however, were invited by the researchers to also participate in the study portion, and all (100%) consented. Participants included 10 males (9 White, 1 Black) and 13 females (11 White, 2 Black). Of the Reservists, 16 were enlisted personnel and 7 were officers. Seven of the Reservists had served at least one deployment, and all were between the ages of 18 and 52.

Measure

Sleep quality was assessed at the beginning and end of a one-month period using the Pittsburgh Sleep Quality Index (PSQI; Buysse et al., 1989). As a standardized
sleep assessment, the PSQI has demonstrated good internal consistency and high reliability and validity in previous studies (Mollayeva et al., 2016).

The assessment contained fill-in-the-blank questions related to usual bedtime and wake-up time, average number of minutes to fall asleep, and number of hours of sleep per night that month. Quality of sleep was rated as either very good, fairly good, fairly bad, or very bad.

The assessment also contained a series of ranked or scaled response items. Items were designed to assess seven components of sleep quality, including subjective sleep quality, sleep latency, sleep duration, habitual sleep efficiency, sleep disturbances, use of sleeping medication, and daytime dysfunction (Buysse et al., 1989). Each component was derived from either a single item on the assessment or through a combination of items used to generate an individual score which contributed to the total PSQI score. Higher scores reflected more sleep problems (Buysse et al., 1989).

Procedure

All procedures were approved by Truman University’s Institutional Review Board. A pretest/posttest one-group design was used in this study. Six community health educators delivered this intervention as part of an Army Training Triad presentation during an Army Reserve drill weekend in the spring of 2018. The community health educators were young adult volunteers from a local university public health degree program who were studying for certification as health education specialists. They were experienced in health intervention program planning and implementation and had taught in a variety of settings and with diverse populations for many years. The intervention consisted of one lecture that lasted approximately three-quarters of an hour, followed by a small-group activity lasting approximately 15 minutes that demonstrated how to use the SleepSTAR website.

Prior to the lecture and small-group activity, participants completed a written PSQI pre-assessment to assess self-reported sleep quality and duration. Community health educators delivered lecture material gathered from the “Why Sleep Matters,” “The Science of Sleep,” and “Getting the Sleep You Need” sections from Harvard’s Healthy Sleep website (http://healthysleep.med.harvard.edu). The community health educators emphasized the importance of proper sleep hygiene and provided evidence-based suggestions for obtaining adequate sleep.

Following the 45-minute lecture, participants were divided into small groups. A community health educator for each group explained and demonstrated how to use the web-based program. Educators demonstrated use of the web-based tools containing technology-assisted techniques to relax the mind and reduce stress (SleepSTAR, n.d.). Although there are many choices for sleep hygiene education interventions, the online SleepSTAR training was chosen for its ease of use, lack of
cost, and variety of sleep hygiene tools tailored to each user. The community health educators and the researchers had no conflict of interest using this commercial application.

Upon each log-in, participants are assessed on their current stressors and physical tension spots, provided tailored instruction on sleep hygiene, instructed in specific exercises to clear the mind and reduce physiological tension, and provided tips and techniques to create healthy sleep and lifestyle habits. Participants were asked to download the program to their electronic devices and were encouraged to use the program to assist in their sleep hygiene routine for one month. During that one-month period, participants were asked to record the number of nights they used the program. At the one-month mark, participants completed the PSQI post-assessment during their Army Triad training at the next month’s drill weekend.

Analysis

Descriptive statistics we used to examine PSQI items, and subscales did not allow for inferential analyses. Paired sample t-tests were used to assess pre-post changes in total PSQI scores and average number of hours slept.

Results

A total of 18 participants completed all the necessary components to calculate total PSQI scores. A paired sample t-test used to assess pre-post changes in total PSQI scores from the multiple-choice sleep component items failed to reveal a statistically significant change (t(17) = 0.159, p > .05); however, from the fill-in-the-blank questions, a statistically significant difference in the mean number of self-reported hours slept that month between the pretest (M = 5.79, SD = 1.146) and the posttest (M = 6.55, SD = 1.094) was noted among the 21 participants who responded to the question, indicating an increase in sleep duration (t(20) = −2.884, p < .05; d = −0.629).

In general, sleep quality remained positive between the pre- and posttests (Table 1). Between the pre- and posttests, no major changes in factors contributing to sleep difficulty were observed. In the posttest, the most common issues negatively affecting sleep included interrupted sleep due to unexpected or early waking, coughing or snoring, and the inability to fall asleep within 30 minutes of going to bed (Table 2).
Table 1. Participant Quality of Sleep Ratings ($n = 23$)

<table>
<thead>
<tr>
<th>Response Rating* [21]</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n (%)</td>
<td>n (%)</td>
</tr>
<tr>
<td>Very good</td>
<td>3 (13.0)</td>
<td>3 (13.0)</td>
</tr>
<tr>
<td>Fairly good</td>
<td>14 (60.9)</td>
<td>15 (65.2)</td>
</tr>
<tr>
<td>Fairly bad</td>
<td>6 (26.1)</td>
<td>2 (8.7)</td>
</tr>
<tr>
<td>Very bad</td>
<td>0 (0.0)</td>
<td>1 (4.3)</td>
</tr>
<tr>
<td>No response</td>
<td>0 (0.0)</td>
<td>2 (8.7)</td>
</tr>
</tbody>
</table>
### Table 2. Factors Contributing to Sleep Difficulty ($n = 23$)

<table>
<thead>
<tr>
<th>Factors [21]</th>
<th>Test</th>
<th>Not during the past month $n$ (%)</th>
<th>Less than once a week $n$ (%)</th>
<th>Once or twice a week $n$ (%)</th>
<th>Three or more times a week $n$ (%)</th>
<th>Missing data $n$ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannot get to sleep within 30 minutes</td>
<td>Pre</td>
<td>8 (34.8)</td>
<td>6 (26.1)</td>
<td>4 (17.4)</td>
<td>5 (21.7)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>8 (34.8)</td>
<td>4 (17.4)</td>
<td>9 (39.1)</td>
<td>1 (1.4)</td>
<td>1 (4.3)</td>
</tr>
<tr>
<td>Wake up in the night or early morning</td>
<td>Pre</td>
<td>5 (21.7)</td>
<td>4 (17.4)</td>
<td>6 (26.1)</td>
<td>8 (34.8)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>4 (17.4)</td>
<td>3 (13.0)</td>
<td>8 (34.8)</td>
<td>7 (30.4)</td>
<td>1 (4.3)</td>
</tr>
<tr>
<td>Get up to use the bathroom</td>
<td>Pre</td>
<td>9 (39.1)</td>
<td>4 (17.4)</td>
<td>7 (30.4)</td>
<td>3 (13.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>7 (30.4)</td>
<td>6 (26.1)</td>
<td>8 (34.8)</td>
<td>1 (4.3)</td>
<td>1 (4.3)</td>
</tr>
<tr>
<td>Cannot breath comfortably</td>
<td>Pre</td>
<td>19 (82.6)</td>
<td>2 (8.7)</td>
<td>1 (4.3)</td>
<td>1 (4.3)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>18 (78.3)</td>
<td>1 (4.3)</td>
<td>2 (8.7)</td>
<td>1 (4.3)</td>
<td>1 (4.3)</td>
</tr>
<tr>
<td>Cough or snore loudly</td>
<td>Pre</td>
<td>14 (60.9)</td>
<td>2 (8.7)</td>
<td>4 (17.4)</td>
<td>3 (13.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>11 (47.8)</td>
<td>3 (13.0)</td>
<td>3 (13.0)</td>
<td>5 (21.7)</td>
<td>1 (4.3)</td>
</tr>
<tr>
<td>Feel too cold</td>
<td>Pre</td>
<td>14 (60.9)</td>
<td>3 (13.0)</td>
<td>6 (26.1)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>15 (65.2)</td>
<td>5 (21.7)</td>
<td>2 (8.7)</td>
<td>0 (0.0)</td>
<td>1 (4.3)</td>
</tr>
<tr>
<td>Feel too hot</td>
<td>Pre</td>
<td>7 (30.4)</td>
<td>6 (26.1)</td>
<td>9 (39.1)</td>
<td>1 (4.3)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>9 (39.1)</td>
<td>6 (26.1)</td>
<td>5 (21.7)</td>
<td>2 (8.7)</td>
<td>1 (4.3)</td>
</tr>
<tr>
<td>Have bad dreams</td>
<td>Pre</td>
<td>14 (60.9)</td>
<td>5 (21.7)</td>
<td>2 (8.7)</td>
<td>2 (8.7)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>12 (52.2)</td>
<td>6 (26.1)</td>
<td>2 (8.7)</td>
<td>2 (8.7)</td>
<td>1 (4.3)</td>
</tr>
<tr>
<td>Have pain</td>
<td>Pre</td>
<td>15 (65.2)</td>
<td>5 (21.7)</td>
<td>2 (8.7)</td>
<td>1 (4.3)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>18 (78.3)</td>
<td>0 (0.0)</td>
<td>2 (8.7)</td>
<td>2 (8.7)</td>
<td>1 (4.3)</td>
</tr>
<tr>
<td>Other</td>
<td>Pre</td>
<td>14 (60.9)</td>
<td>2 (8.7)</td>
<td>6 (26.1)</td>
<td>1 (4.3)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>16 (69.6)</td>
<td>0 (0.0)</td>
<td>4 (17.4)</td>
<td>2 (8.7)</td>
<td>1 (4.3)</td>
</tr>
</tbody>
</table>
Discussion

Members of the U.S. military may be more prone to sleep-related problems, prompting the necessity for targeted sleep hygiene interventions. In the present study, no significant change was found in pre- and posttest sleep quality scores. Overall sleep quality was found to be high in the pretest; factors that may contribute to inadequate sleep quality, such as snoring or coughing, may require assistance beyond that provided by the intervention. Additional measures of sleep quality are recommended for future studies.

The current study did see a statistically significant increase in the number of hours slept per night, however. This change over time suggests the intervention may have affected sleep duration. The data appear to provide some support for the use of behavioral approaches to reducing sleep problems in Reservists. The behavioral intervention of sleep hygiene education used in this study has been linked in the literature to improved sleep (Irish et al., 2015; Lipschitz et al., 2014; Nakamura, 2015; Phelps et al., 2017). The online intervention focused on behavioral change exercises as behavioral interventions have previously been used in the military setting in dealing with other mental health issues and may show lasting effects (Seyffert et al., 2016; Thomas & Taylor, 2015).

Limitations surrounding this study should be taken into consideration when determining the practical application of the results. The intervention was done using soldiers from one Army Reserve unit. The intervention should be conducted with soldiers from a wider array of specialties and across a wider geographic area in order to ensure generalizability. Participants did know that they were being studied; they may therefore have responded with socially desirable answers. Positive outcomes may have also come from participant perceptions of the high-tech intervention’s efficacy. In addition, other methods for assessing the impact of the intervention beyond the PSQI should be explored. Although the PSQI is a well-known and respected instrument, other instruments may be better suited to assess the potential impact of short-term interventions. Some of the constructs used to assess sleep quality in the PSQI, such as pain and snoring, may require specialized medical treatment that goes beyond the scope of the present intervention. Further, the present study did not utilize a control-group design, which should be implemented in future studies. The results of this study show preliminary potential positive impact of sleep hygiene education; however, follow-up studies are required.

The authors report no conflict of interest.
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MASKED EMOTIONS: STUDYING THE IMPACT OF THE COVID-19 PANDEMIC ON EMOTIONAL REGULATION IN COLLEGE STUDENTS AND BEYOND

SARA K. TAFT, BUTLER UNIVERSITY
MENTOR: ROBERT PADGETT

Abstract

Studies regarding the socioemotional selectivity theory have found that upcoming endings lead to a positivity bias in individuals' executive functioning. The current study seeks to expand upon this theory by studying the impacts of the COVID-19 pandemic on college students and graduates. It was predicted that (a) current students would demonstrate more negative emotionality than pre-COVID students, (b) current students would demonstrate a greater positivity bias than pre-COVID students, and (c) this bias would be more pronounced in current seniors and weaker in current freshmen and college graduates. Participants responded to several scales regarding personality (neuroticism, shyness) and emotional factors (depression, anxiety, optimism/pessimism, loneliness, general affect) and completed working-memory tasks for happy, neutral, and sad human faces. Results revealed that current students performed significantly worse on all conditions of the working memory task; additionally, current students scored significantly lower on optimism and higher on shyness, anxiety, depression, general affect, and neuroticism. Among current students, only loneliness differed significantly, with first-year students being the most lonely. Although findings were inconsistent with the socioemotional selectivity theory, they suggest that overall emotionality can have detrimental effects on executive functioning. Findings that first-year students are significantly more lonely than pre-COVID students and other current students suggests that social-distancing practices are having a particularly negative effect on connectedness for these students.

Key words: COVID-19, college students, emotion regulation, executive functioning, socioemotional selectivity theory

Since the first outbreak of the coronavirus disease 2019 (COVID-19) in the Chinese city of Wuhan, there had been nearly 29 million confirmed cases and approximately 524,000 deaths in the United States alone as of March 11, 2020 (World Health Organization, 2020). Unprecedented attempts to control the disease via physical, or “social,” distancing have shut down normal life. This has included forced
school closures, canceled graduations, and uncertain futures for college and high school graduates as well as current college students as they move into their next stage of life. By mid-March of 2020, more than 1,100 colleges and universities throughout the nation had canceled in-person classes, in addition to multiple cancellations or postponements of spring graduation ceremonies (Smalley, 2020). Though a new school year is officially under way, many questions remain unanswered for college students about what the “new normal” will be under COVID-19 conditions.

The threats to physical health are well documented (Couzin-Frankel, 2020), yet just as important—though perhaps less studied—are the psychological impacts of the virus. A study by Cao and colleagues (2020) conducted on college students in China found a positive association between anxiety symptoms and economic effects, impact on daily life, and delays in academics, demonstrating that the significant changes occurring in multiple areas of life because of the pandemic have led to an increase in anxiety symptoms for college students. Furthermore, anxiety for individuals could be heightened by the reminder of their own mortality as a result of the current pandemic and the increasing mortality rates for all age groups caused by COVID-19 (Usher et al., 2020; World Health Organization, 2020). Additionally, it has been demonstrated that COVID has had a negative effect on cognition. In research conducted on more than 60,000 Chinese residents during the pandemic, Jiang and colleagues (2020) found that individuals tended to show negative cognitive processing bias as demonstrated by a negative attention bias (paying greater attention to negative information relative to neutral or positive information) as well as a negative memory bias (demonstrating a better memory of negative information compared to neutral or positive information) and rumination (repeated thinking and reflection on negative feelings). The researchers found that such measures were related to increased levels of anxiety and depressive symptoms. This research suggests that the pandemic has led to increased negative cognitive processing among individuals, perhaps because of increased social disconnection. Jiang and colleagues also reported that several factors, such as good family functionality, a good work environment, and social activities—factors that are significantly restricted for college students in the United States—decreased levels of depressive and anxiety symptoms. In fact, research has connected impairments in emotional and cognitive functioning in individuals with greater social disconnection due to the social isolation procedures implemented during the pandemic (Bland et al., 2021).

The emotional and cognitive processing changes demonstrated during pandemic life may have interesting effects on phenomena surrounding socioemotional selectivity theory, which posits that as an individual approaches some sort of life event that marks an ending to a particular life phase, the individual’s emotions become progressively salient (Mather & Carstensen, 2003). More specifically, older adults have been found to demonstrate a positivity bias, meaning that such individuals attend more to positive emotional information than to neutral or
negative emotional information (Charles et al., 2003; Cypryańska et al., 2014; Mather & Carstensen, 2003). It has been suggested that this pattern can be explained by a change in motivational focus that affects cognitive processing. For example, older individuals may become more aware of impending endings and may adjust their focus to more positive information in order to maintain greater emotional well-being (Carstensen et al., 2003). Significantly, research by Pruzan and Isaacowitz (2006) has uncovered the same positivity bias in graduating college seniors relative to first-year students, demonstrating that cognitive aging does not play a role in the motivation behind emotion regulation. In the current pandemic life, the loss of expected endings—for example, graduation ceremonies and celebrations for high school and college seniors, referred to herein as closure activities—has left individuals with anxiety over what is to come next (Cao et al., 2020). In turn, this may prompt the motivation to maintain emotional well-being through emotional selectivity, as demonstrated in the study by Pruzan and Isaacowitz (2006).

This prompts one to ask how college students are coping during these challenging times. Though Cao and colleagues’ (2020) study found a negative relationship between social support and level of anxiety in college students, college students have been largely removed from their social support groups because of the social-distancing orders and cancellation of in-person classes (Smalley, 2020). In fact, a survey conducted by YoungMinds found that 83% of respondents under 25 reported that their mental health had worsened during the pandemic because of school closings, restrictions on social connection, and loss of routine (YoungMinds, 2020).

To date, research related to socioemotional selectivity theory has only considered typical life events that mark endings, such as death or college graduation (Charles et al., 2003; Mather & Carstensen, 2003; Pruzan & Isaacowitz, 2006). The current research is significant because it investigates the role of socioemotional regulation when individuals are denied their closure activities (e.g., end-of-school activities and graduation). Essentially, this research sought to answer the question of what impact missed opportunities have on emotion regulation. As research regarding socioemotional selectivity theory has found that life events marking an ending alter emotion regulation, this research sought to uncover what effect the cancellation of such events had on emotion regulation. Additionally, this research is significant because it took into account an atypical life event happening on a global scale. COVID-19 has disrupted normal life for every individual, particularly for students (Smalley, 2020). This research exemplifies some of the ways in which national events can affect the psychological processes of individuals.

The current study sought to investigate what impact the COVID-19 pandemic has had on college students’ and 2020 college graduates’ cognitive processing of emotional stimuli. Firstly, it was predicted that all current students, regardless of class year, would demonstrate a more negative emotionality than students prior to the pandemic because of the extreme, largely negative, changes to daily living. It was also
predicted that all current students, regardless of class year, would demonstrate a positivity bias, given that there is likely a heightened awareness of their own mortality in addition to lost closure activities, in comparison to students prior to the pandemic (Smalley, 2020; Usher et al., 2020). It was expected that this bias would be even more pronounced in current seniors, given that they were approaching graduation and that the future for these individuals, especially in light of the pandemic, was more likely to be unknown. In contrast, it was predicted that the bias would be weaker in 2020 college graduates and incoming college freshmen; although both groups lost their closure activities, college graduates had moved on to their next phase of life and had likely obtained jobs, while college freshmen were getting ready to begin their college years, meaning that the need to maintain positive emotionality in light of a significant ending in life had passed for these individuals.

Pre- versus Post-Pandemic Comparisons

As noted above, all the students in this study may well show emotional-regulation issues because all current students have experienced a variety of losses due to pandemic restrictions regardless of class year. In order to understand how the pandemic might affect emotional regulation across all students, we wanted to compare not only students nearing graduation with students earlier in their college careers but also performance of current pandemic students to that of students pre-pandemic on the same measures. In order to make such comparisons, we searched the psychological literature for data from past studies (pre-pandemic) that had used at least one or more of the measures used in this study with a similar population of students. We gathered known means for each of the measures employed in this study from the literature across a variety of studies (see Table 1) and entered those known means for comparisons using one-sample t-tests. In addition to hypothesizing differences across years, we hypothesized that all students would show differing levels of emotional regulation compared to pre-pandemic measures.
Table 1. Emotionality and Memory Measures Compared to Known Pre-COVID Values in College Students

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean (St. Dev)</th>
<th>Known Mean</th>
<th>One-Sample t (df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>outlook on life</td>
<td>19.65(5.0)</td>
<td>14.35&lt;sup&gt;1&lt;/sup&gt;</td>
<td>11.6(117)&lt;sup&gt;***&lt;/sup&gt;</td>
</tr>
<tr>
<td>shyness</td>
<td>22.58(10.5)</td>
<td>30.55&lt;sup&gt;2&lt;/sup&gt;</td>
<td>-8.2(117)&lt;sup&gt;***&lt;/sup&gt;</td>
</tr>
<tr>
<td>PANAS Negativity</td>
<td>24.45(7.4)</td>
<td>18.10&lt;sup&gt;3&lt;/sup&gt;</td>
<td>9.3(117)&lt;sup&gt;***&lt;/sup&gt;</td>
</tr>
<tr>
<td>PANAS Positivity</td>
<td>33.71(7.4)</td>
<td>35.10&lt;sup&gt;4&lt;/sup&gt;</td>
<td>-2.0(117)&lt;sup&gt;*&lt;/sup&gt;</td>
</tr>
<tr>
<td>Loneliness</td>
<td>35.30(10.9)</td>
<td>36.21&lt;sup&gt;5&lt;/sup&gt;</td>
<td>-0.9(117)</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>56.12(13.1)</td>
<td>50.80&lt;sup&gt;6&lt;/sup&gt;</td>
<td>4.4(117)&lt;sup&gt;***&lt;/sup&gt;</td>
</tr>
<tr>
<td>Depression</td>
<td>22.00(11.5)</td>
<td>15.15&lt;sup&gt;7&lt;/sup&gt;</td>
<td>6.5(117)&lt;sup&gt;***&lt;/sup&gt;</td>
</tr>
<tr>
<td>Anxiety</td>
<td>33.02(7.8)</td>
<td>34.50&lt;sup&gt;8&lt;/sup&gt;</td>
<td>-2.1(117)&lt;sup&gt;*&lt;/sup&gt;</td>
</tr>
<tr>
<td>Faces: Person Neutral</td>
<td>66.22(16.2)</td>
<td>75.25&lt;sup&gt;9&lt;/sup&gt;</td>
<td>-4.1(86)&lt;sup&gt;***&lt;/sup&gt;</td>
</tr>
<tr>
<td>Faces: Person Happy</td>
<td>69.70(17.6)</td>
<td>76.72&lt;sup&gt;10&lt;/sup&gt;</td>
<td>-3.7(86)&lt;sup&gt;***&lt;/sup&gt;</td>
</tr>
<tr>
<td>Faces: Person Sad</td>
<td>68.82(20.0)</td>
<td>75.60&lt;sup&gt;11&lt;/sup&gt;</td>
<td>-3.2(86)&lt;sup&gt;**&lt;/sup&gt;</td>
</tr>
<tr>
<td>Faces: Person Memory</td>
<td>11.10(1.4)</td>
<td>9.8&lt;sup&gt;12&lt;/sup&gt;</td>
<td>8.5(86)&lt;sup&gt;***&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Note: Positive t values indicate post-COVID values higher than pre-COVID values. Negative t values indicate post-COVID values lower than pre-COVID values. PANAS = Positive and Negative Affect Scale.


*p < .05.  **p < .01.  ***p < .001.

Method

Participants

In total, 118 current Butler University students and graduates consented to take part in this study. Of these, 106 were current students, with 18 being first-years, 24 second-years, 35 third-years, and 29 fourth-years, and 11 were 2020 psychology graduates. Overall, 16 identified as male and 102 as female; 104 identified as White, and 28 identified as non-White. Students’ ages ranged from 16 to 23, with the average age being 20.38 (SD = 1.37).
Materials

The following scales were used to measure a variety of personality and emotion variables.

Affect

Participants responded to the Positive and Negative Affect Scale (PANAS), constructed by Watson and colleagues (1988). Participants responded to 20 different emotion words and stated the extent to which they had experienced that emotion in the few weeks prior to their participation in the study. Responses were given on a scale of 1 (very slightly or none at all) to 5 (extremely). Cronbach’s alpha was .85 for negative affect and .89 for positive affect. Data on this measure were compared to a sample from research conducted by Watson and colleagues (1988).

Anxiety

The Anxiety subscale of the HEXACO Personality Inventory as established by Lee and Ashton (2004). Participants responded to 20 statements on a scale of 1 (rarely or none of the time) to 4 (most or all of the time). Cronbach’s alpha was .86. Data on this measure were compared to data from research by Lee and Ashton (2006).

Depression

Participants also completed the Center for Epidemiologic Studies Depression Scale (CES-D), a 20-item scale detailing their depressive symptomatology, as established by Radloff (1977). Participants stated the degree to which they felt they had experienced each statement on a scale of 1 (rarely or none of the time) to 4 (most or all of the time). Cronbach’s alpha was .93. Data on this measure were compared to data from work by Simon, DiPlacido, and Conway (2019).

Loneliness

The Revised UCLA Loneliness Scale was used to assess participants’ experiences of loneliness (Russell et al., 1980). Participants responded via a scale of 1 (never) to 4 (often) to 20 items to indicate how often they felt the statements applied to them. Cronbach’s alpha was .93. Results were compared to a sample from research conducted by Rotenberg and Korol (1995).

Neuroticism

The Revised NEO Personality Inventory was used to evaluate the extent of participants’ neuroticism (Costa & McCrae, 1992). Participants responded to 20
statements, indicating the extent to which they felt the statements were very inaccurate (1) to very accurate (5) for them. Cronbach’s alpha was .89. Data from the current sample were compared with a sample from research conducted by Donnellan and colleagues (2006).

**Optimism and Pessimism**

The Life Orientation Test was established by Scheier and Carver (1985) to measure the extent to which individuals tend to be optimistic or pessimistic in their outlook on life. Participants responded to 12 statements on a scale of 0 (strongly disagree) to 4 (strongly agree). Cronbach’s alpha was .80. Data on this measure were compared to data from research conducted by Scheier, Carver, and Bridges (1994).

**Shyness**

Participants’ degree of shyness was assessed using the Revised Buss Shyness Scale (Cheek, 1983). Participants read and responded to 13 statements using a scale of 0 (strongly disagree) to 4 (strongly agree). Cronbach’s alpha was .91. Data on this measure were compared to data from research conducted by Koydemir and Demir (2008).

An n-back working memory task involving human faces created by Taylor, Hernandez, and Lineweaver (2010) was used to assess participants’ memory for emotions of positive and negative valences. The task included three sections of 90 items each, as well as a final memory-recall task of 12 items. The first section involved human faces portraying neutral emotions. In the second section, human faces portrayed happiness (a positively valenced emotion), and in the third section, human faces portrayed sadness (a negatively valenced emotion). Participants were tasked with saying whether the person in the current trial was the same person depicted two trials prior. In the final task, participants viewed 12 pictures one at a time and indicated whether they had seen the emotion portrayed in any of the first three tasks. Individuals received scores for each emotion task (sad, neutral, and happy), as well as a final combined n-back score.

**Procedure**

Undergraduate students at Butler University were recruited via Sona and had the opportunity to earn extra credit in a psychology course. After completion of the study’s first session, current students received the link to the second session of the study and were given three weeks to complete the second session before their data became void. Butler 2020 graduates of the psychology department were recruited via direct e-mail from the researcher. In return for their participation, each of these
individuals received a $20 gift card. Links to both portions of the study were included in the e-mail for graduates for these individuals to complete at their discretion.

In the first session of the study, participants read and gave informed consent; if they denied consent, the window to the study closed. Once consent was given, participants answered several demographical questions, which included age, year in school (first-year/freshman to graduate student, or college graduate), race, and sex. In addition, graduates were asked to provide an e-mail address so they would receive the gift card. Following the questions on demographics, participants completed seven self-report surveys on the various emotion and personality variables. This portion of the study took place on Qualtrics.

In the second session of the study, participants completed the n-back working-memory task as well as the memory-recall task. Once the final session was completed, current students were granted credit and graduates received their gift cards via e-mail.

Results

Comparison of Pandemic Participants Across Class Years

To compare participants across class years (first-years/freshmen, sophomores, juniors, seniors, and graduates), a one-way multivariate analysis of variance (MANOVA) was performed. That analysis revealed a significant cohort effect (Wilk’s $\lambda = 0.007; F(8, 104) = 1767, p = .001$). This test was followed by a set of one-way ANOVAs for each of the measures of emotionality, which revealed significant cohort differences on loneliness ($F(4, 111) = 3.27, p = .014$) and negative affect ($F(4, 111) = 3.07, p = .019$). For loneliness, post hoc analysis revealed that first-years differed significantly from all other years, with first-years being significantly more lonely than other class years. For negative affect, significant differences occurred between second-years and graduates, and between third-years and fourth-years. There were no significant cohort differences on any of the n-back working-memory measures.

Though failing to reach a level of significance, some factors demonstrated possible trends. Levels of optimism related to life outlook ($F(1, 111) = 2.02, p = .09$) increased by year, with first-years ($M = 17.154, SD = 1.264$) demonstrating a more negative outlook relative to college graduates ($M = 20.125, SD = 1.612$). Within each year, positive affect was consistently greater than negative affect (first-years: positive affect $M = 33.077, SD = 2.049$ and negative affect $M = 23.385, SD = 2.044$; second-years: positive affect $M = 34.632, SD = 1.695$ and negative affect $M = 25.842, SD = 1.691$; third-years: positive affect $M = 34.043, SD = 1.540$ and negative affect $M = 24.217, SD = 1.537$; fourth-years: positive affect $M = 33.524, SD = 1.612$ and negative affect $M = 26.952, SD = 1.608$; graduates: positive affect $M = 33.750, SD = 2.612$ and negative affect $M = 19.875, SD = 2.606$).
Regression analysis revealed that measures of personality and emotion variables predicted overall n-back scores ($R^2 = .187; F(8, 75) = 2.15, p = .041$); however, only scores on positivity, as measured by the PANAS scale, were significant in predicting n-back scores ($\beta = -.300$, zero-order correlation = -.281, $p = .014$). These results are summarized in Table 2 and depicted in Figure 1.

Table 2. Multiple Regression Analysis of Emotionality and Memory Measures on Overall Executive Functioning (Total n-Back Score)

<table>
<thead>
<tr>
<th>Model</th>
<th>Beta</th>
<th>Zero-Order Corr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outlook on Life</td>
<td>-.009</td>
<td>-.140</td>
</tr>
<tr>
<td>Shyness</td>
<td>.132</td>
<td>.136</td>
</tr>
<tr>
<td>PANAS Negativity</td>
<td>-.281</td>
<td>-.128</td>
</tr>
<tr>
<td>PANAS Positivity</td>
<td>-.300*</td>
<td>-.281**</td>
</tr>
<tr>
<td>Loneliness</td>
<td>.057</td>
<td>.027</td>
</tr>
<tr>
<td>Neuroticism</td>
<td>.247</td>
<td>.136</td>
</tr>
<tr>
<td>Depression</td>
<td>-.290</td>
<td>-.018</td>
</tr>
<tr>
<td>Anxiety</td>
<td>.091</td>
<td>-.075</td>
</tr>
</tbody>
</table>

Note: $R^2 = .187; F(8, 83) = 2.15, p = .041$.

* $p < .05$. ** $p < .01$. 
Figure 1. Mean Level of Reported Feelings of Loneliness and Negativity as a Function of Year in School

**PANAS Negativity and Loneliness**

Note: Protected post hoc tests show that first-year students reported feeling more loneliness than did other groups, which did not differ from each other. Seniors reported higher levels of negative affect than did college graduates.

**Comparison of Results for Pandemic Students and Pre-Pandemic Students**

Using one-sample t-tests to compare n-back and memory data to those of students prior to the pandemic, it was found that current students fared significantly worse on working-memory tasks in comparison to pre-COVID students for neutral faces ($M = 68.22, SD = 16.172; t(86) = -4.056, p < .000$), happy faces ($M = 69.70, SD = 17.569; t(86) = -3.726, p < .000$), and sad faces ($M = 68.82, SD = 20.052; t(86) = -3.156, p = .002$). Current students performed significantly better than pre-COVID students on the memory task, however ($M = 11.10, SD = 1.423; t(86) = 8.546, p < .000$).

In regard to the measures on affect, anxiety, depression, loneliness, neuroticism, optimism and pessimism, and shyness, current students were significantly different from pre-COVID students on optimism and pessimism ($M = 19.653, SD = 4.978; t(117) = 11.572, p < .000$), shyness ($M = 22.578, SD = 10.532; t(117) = -8.225, p < .000$), affect (negative: $M = 24.449, SD = 7.428; t(117) = 9.285, p < .000$; positive: $M = 33.712, SD = 7.438; t(117) = -2.027, p = .045$), neuroticism ($M = 56.119, SD = 13.115; t(117) = 4.405, p < .000$), depression ($M = 22, SD = 11.467; t(117) = 6.489, p <
.000), and anxiety ($M = 33.017, SD = 7.795; t(116) = -2.058, p = .042$). Differences on the loneliness measure were insignificant between current students and pre-pandemic students. These differences are presented in Table 1.

**Discussion**

The current study sought to investigate what effect the COVID-19 pandemic has had on the cognitive processing of emotional stimuli by current college students and 2020 college graduates. The study used n-back and memory tasks to assess college students’ and graduates’ memory for neutral, positive (i.e., happy), and negative (i.e., sad) human faces. It was predicted that all current students would demonstrate a more negative emotionality than pre-COVID students. Additionally, it was predicted that all current students, regardless of class year, would demonstrate a positivity bias when compared to students prior to the pandemic but that this bias would be more pronounced in current seniors and weaker in 2020 college graduates and incoming college freshmen. Results regarding these predictions were mixed, however.

Compared to pre-COVID students, current students demonstrated significantly different scores for all three emotion conditions. It was predicted that current students would have a greater memory for positive relative to neutral or negative emotions, but this was not the case; current students performed worse on all conditions relative to students before the pandemic. These results were in spite of the fact that, though insignificant, each class of current students consistently demonstrated higher positive affect scores than negative affect scores. While this doesn’t support the findings of socioemotional selectivity theory as predicted based on previous research (Charles et al., 2003; Cypryńska et al., 2014; Mather & Carstensen, 2003), it does suggest that various emotional factors may affect executive functions. Research has found connections between executive dysfunction and depression and anxiety (Warren et al., 2020), neuroticism (Sutin et al., 2019), and negative affect (Shields et al., 2017). Indeed, within this study, current students demonstrated higher levels of shyness, negative affect, neuroticism, anxiety, and depression relative to pre-COVID students.

Additionally, current students demonstrated decreased levels of positive affect. This is consistent with research linking negative cognitive processing and memory biases to increased levels of anxiety and depressive symptoms during the pandemic (Jiang et al., 2020).

Interestingly, current students did not differ significantly in loneliness compared to pre-COVID students as may have been predicted given the current social-isolation procedures in place to control the spread of the virus. The lack of this significant difference may indicate that current students have adjusted to these procedures.
The predictions that bias would be more pronounced in current seniors and weaker in 2020 college graduates and incoming college freshmen were not supported. Socioemotional selectivity theory would predict that because current seniors are approaching graduation and college freshmen and college graduates have just graduated and are entering a new phase of life, current seniors would demonstrate the positivity bias and current freshmen and college graduates would not; the absence of this finding is inconsistent with previous research (Pruzan & Isaacowitz, 2006). It may be that the current environment created by the pandemic has given students something beyond impending endings to worry about, therefore overshadowing any need to maintain positivity. Indeed, it was found that scores on the positive affect scale were the only significant indicator of total scores on the n-back task reflecting all three types of emotions; with every increase in positive emotionality, there was a corresponding decrease in total n-back scores, which is inconsistent with previous research into socioemotional selectivity theory (Charles et al., 2003; Cypryańska et al., 2014; Mather & Carstensen, 2003). Although it was predicted that the loss of closure activities (e.g., graduation) and other activities (e.g., school events) would induce a positivity bias as students attempted to maintain a happy disposition, students may be less focused on lost opportunities and more concerned with the negative effect that these losses have on their mental health overall (Bland et al., 2021; Cao et al., 2020; Jiang et al., 2020).

Within current students specifically, a significant difference occurred in experiences of loneliness between first-years and all other years, with first-years demonstrating the highest levels of loneliness overall. It is not uncommon for college freshmen to feel lonely after their transition to college; however, finding that current freshmen during the pandemic are feeling more lonely than pre-pandemic freshmen suggests that current social-distancing procedures have impeded these students’ formation of connections with other students on campus and suggests that more steps may need to be taken to help these students acclimate to college life, regardless of how much longer the pandemic lasts. This is consistent with other findings regarding college freshmen during the pandemic (Arslan, 2021; Williams, 2020).

Limitations of the current study could point to further research in testing the effects of the pandemic on socioemotional functioning. First, because this study was conducted nearly one year into the pandemic, this population of individuals may have grown accustomed to the “new normal” of the pandemic, therefore blurring any differences in socioemotional functioning among students of different years. Indeed, 2020 college graduates have likely adjusted one year after their graduation and have moved on to their next phase of life; current seniors, now only a few months away from graduation, have likely determined what they will do following their graduation; and other undergraduate students have likely grown accustomed to the new social-distancing practices required of them. Second, this study lacked racial diversity, with only 23% of participants identifying as non-White, and because COVID has been
shown to disproportionately affect people of color (Karaca-Mandic et al., 2020), it may be important to conduct a similar study of students of color. Finally, this study was conducted on a small private university campus in the Northwest, therefore limiting its generalizability. Further research may consider performing a national study on the socioemotional well-being of college students.

Even so, the current research indicates that current college students are functioning at a lower emotional well-being, leading to decreased executive functioning. As the country is far from returning to the normal it used to know, it is likely that the effects of social-distancing practices implemented during the pandemic will continue to have negative effects on college students for the foreseeable future, and steps must be taken for improvements in mental health to occur.
References


influence of limited time horizon on positivity effects among young adults using eye-tracking. *Psychological Reports, 115*(3), 813–827. https://doi.org/10.2466/02.pr0.115c28z8


ONLINE SPECIAL EDUCATION IN THE UNITED STATES AND PERU: A COMPARISON OF RESPONSES TO COVID-19

MARIA BERROCAL, HOWARD COMMUNITY COLLEGE
MENTOR: MATTHEW VAN HOOSE

Abstract

Public special education systems have distinct levels of economic resources at the international and local levels, as well as different social-cultural attitudes toward students with disabilities. This study is an in-depth exploration of those differences as they apply to the special education systems of Peru and the United States within the context of the COVID-19 pandemic. I give particular focus to Aprendo en casa, a Peruvian multichannel distance education service for television, radio, and the Internet that was launched in April of 2020 because of the state emergency. I examine lessons from Aprendo en casa to identify the learning strategies they present for reaching students with diverse types of learning challenges, and compare those strategies with those identified in the broader scholarly literature as well as the pandemic experiences of public-school teachers in Howard County, Maryland. This comparative lens provides new perspectives on how teaching and learning within special education adapted to the COVID-19 pandemic. It also brings into clearer focus the broader social, economic, and political factors that shape special education in both countries.

Key words: special education, Peru, United States, online learning, inequalities, accessibility, COVID-19

Introduction

Special education is approached differently by different countries, like the United States and Peru. In this paper, I conduct a case study of a new Spanish-language online learning platform in Peru, called Aprendo en casa, and use it to compare and contrast approaches to special education in the United States and Peru during the COVID-19 pandemic. By situating this case study within relevant scholarly literature and consultation with experts in the field, I will add to the current literature base.

Aprendo en casa is a multichannel distance learning service for television, radio, and the web. The short-term goal for this service is to educate students of basic education (those in elementary, middle, high, and special education). The platform launched on April 6, 2020, when COVID-19 closed all the schools in Peru. When designing the remote learning plan for Aprendo en casa, public and private partners supported the goals for ensuring that learning sessions are delivered and are free of cost for all students. The medium- and long-term goals for this program are to instruct
students by stimulating discussion and reflection and to build knowledge in different subjects. Peru’s education system currently relies heavily on *Aprendo en casa*, with teachers and students communicating through Zoom, WhatsApp, and e-mail where possible, but the teachers and students mostly rely on a television broadcast version of *Aprendo en casa* (Al Jazeera English, 2020). Content is also translated as needed into indigenous languages such as Quechua. In rural and indigenous areas of Peru, not everyone receives radio and television signals, so teachers also receive content through WhatsApp, which they then relay to students through phone calls, text messages, and WhatsApp, sometimes accompanied by videos that the teachers record themselves. The overall curriculum for *Aprendo en casa* consists of learning guides, audio recordings, videos, and workbooks that are available by level and by grade. Activities are scheduled for five days of the week, with different activities each day. Specifically for special education students, only one activity per week is scheduled.

**Methods**

This qualitative study was initially framed by a literature review on teaching and learning approaches for special education and on how they compare internationally. With this literature review as context, I closely analyzed materials and lessons available through the online *Aprendo en casa* platform. Specifically, I analyzed six separate online lessons for elementary-aged students covering both subject-area content and life skills. I viewed two versions of each lesson: the version directed toward students without learning differences, and the version created for special education students. My analysis extended to written materials provided on the *Aprendo en casa* website, which included worksheets for students as well as guidance for parents and caregivers. This analysis yielded insights about the approach to special education taken by *Aprendo en casa* in five main areas: social skills, accessibility, active learning, educational access, and inequality in Peru.

With these primary themes identified, I observed two teacher interviews that formed part of a separate student research project on approaches to special education in the public school system of Howard County, Maryland (Almony, 2021). I also consulted directly with that study’s principal investigator and a special education specialist on the faculty of Howard Community College (E. O’Hanlon, personal communication, April 2021) to gain a sense of how her results compared and contrasted with my findings from *Aprendo en Casa*.

**Results**

As noted above, the methods employed for this project yielded insights into online special education approaches in Peru and Howard County in the following main areas: social skills, accessibility, active learning, educational access, and inequality in Peru.
Social Skills

When I spoke with Howard County public school special educators, we discussed the different learning needs of special education students. The first thing we discussed was the emphasis within special education on social skills that students can use daily to communicate and interact. I then reviewed and analyzed how *Aprendo en casa* teaches students this skill. *Aprendo en casa* is well structured to teach students social skills. Even though social skills cannot be practiced by the student via a video, *Aprendo en casa* implements some innovative solutions. During each video, instructors ask questions about social skills and give students some time to consider the answer. Afterward, the instructors reply with the answers in a highly conversational fashion. Another way *Aprendo en casa* interacts with students is by using books. *Aprendo en casa* reads a lot of picture books to the students; this is an effective way to introduce topics to them with concepts that are related to social skills and beginning conversations. Such techniques attempt to approximate a synchronous rather than asynchronous learning environment.

In an examination of the U.S. and Peruvian learning environments, the disparate levels of resources between the two countries are apparent. From observing an interview with a Howard County public school teacher, I learned that Howard County teachers incorporate many approaches to teaching social skills through Zoom and Google Classroom. This was challenging when quarantines due to COVID-19 began and students had to switch to online instead of in-person classes. This transition interrupted familiar routines and placed additional stress on both students and parents. Howard County public schools, however, possessed resources for navigating this transition. One example is a specific class for role-playing, in which students play a game through Zoom with other students. The teacher handles all the pieces and the game, and the students communicate by asking what attack they want to use or if they want to attack the monsters or not. The purpose of this game is to eliminate monsters, and each time a monster is eliminated, students level up as a team. As students progress through the game, they can obtain better armor and weapons to use. This role-playing class offers a way for students to interact with the teacher and have agreements or disagreements with classmates. These interactions with classmates can be an effective way to practice their social skills online because they cannot practice in person. Comparing this one class to *Aprendo en casa*, it is apparent that Howard County has more resources at its disposal to create a truly synchronous experience that benefits special education students. Peru is doing what it can with the resources and technology at its disposal, however.

Accessibility

Even though I could not meet teachers from Peru, *Aprendo en casa* provides ample documentation for approaches to engage students during the pandemic. The
platform’s emphasis on accessibility is notable in the presence of a Spanish Sign Language interpreter in every video. This shows how inclusive this channel is while teaching others. Teachers in the Howard County public schools also noted significant attention paid to accessibility. One teacher remarked that Google Classroom is more inclusive and friendly than Zoom because it includes a screen reader that will read an article out loud to the student and teachers can write private messages to students who might need reminders for assignments. Google Classroom also offers a live captioning option for students with hearing difficulties or sensibility to sound, which Zoom has not offered until very recently. Here again, while Aprendo en casa faces more limitations in relation to available software, it is still setting a notable example through its efforts to address accessibility.

Active Learning

Branstetter (2020) notes, “Distance learning is challenging for many learners, but can be even more challenging for students with learning, attenuation, or social-emotional needs.” To address this challenge, teachers can create learning environments that are more active, hands-on, and socially engaged. If students were in school, for example, teachers would greet them in person by saying, “I see you, I know you, I’m connecting with you, and you’re important to me” (Edutopia, 2019). Tools such as Zoom and Google Classroom can facilitate these approaches in the virtual format. For instance, teachers can use the waiting room feature in Zoom to greet students through one by one. The same tools allow students to interact with each other or discuss a question of the day posed by the teacher. Requiring students to attend virtual office hours can allow teachers to connect with each student better one-on-one. Activating social connections in these ways through Zoom and Google Classroom can help to compensate for the absence of in-person instruction.

For its part, Aprendo en casa has only certain tools at its disposal for stimulating this kind of active learning approach, but the curriculum does make many efforts in this vein. As previously discussed, lessons usually teach students more life-skills techniques. For example, Aprendo en casa engages students in storytelling, which involves reading, and demonstrates how to make bubbles using water, soap, gel, a bowl, and a straw, which allows students to experience a science lesson in a highly hands-on fashion. When the teacher explains how to make bubbles, they also explain to the parents how to support completion of the lesson by students who have different learning styles. This is extremely helpful for the parents to understand better how to support their children’s learning and success.
Educational Inequalities in the United States and Peru

Discrimination

Fellner (2015) discusses how some U.S. families of special education students are declined services because the testing and classification process is challenging to navigate for families with fewer resources. Moreover, most standardized tests in use do not provide insights into a student’s emotional or behavioral characteristics, which makes these tests a flawed mechanism for tracking students for any purpose, including special education. As a result, many special education students are wrongly categorized and stigmatized as academically hopeless, similar to the pattern observed among students of color.

Even though Fellner’s (2015) analysis touches more on race in the U.S. context, it provides insights that can be applied to the Peruvian case, especially in relation to poverty and classism. Currently, 22.3% of the Peruvian population lives on less than US$5.50 per day (World Bank, 2021). This makes it difficult for parents who are trying to help their children with education. As noted throughout this paper, the sharp wealth disparity between the United States and Peru is apparent in the countries’ approaches to special education but has not entirely prevented Peru from innovating within its available resources.

Technology

Within the context of the COVID-19 pandemic, families may be struggling financially, causing their students to have less education. In the Peruvian case, Aprendo en casa is especially useful because the platform’s use of multiple media channels could help parents and students who cannot afford the transition to online schooling. Aprendo en casa teaches social skills and academic contact in ways that engage both parents and students. This platform’s process first shows a story/video of how to do the activity. Afterward, it teaches the parent how to do this general activity with the student and then offers specific directions on how to instruct each student if the student needs different accommodations. This approach helps students gain the knowledge they need and helps parents support their students’ learning.

As mentioned, however, Peru is not a wealthy country, and some families do not have Internet access to engage with Aprendo en casa via the web. Mueller and Taj (2020) share the story of Delia, a 10-year-old who lives in a rural area of Peru and has been learning at home because of schools being closed indefinitely. She is getting her education through her family’s television, not a computer or a phone. This is possible because Aprendo en casa, a “brand-new library of slickly made educational broadcasts” (Mueller & Taj, 2020), is available not only via the web but also via television. There are certain disadvantages to this approach. For example, Delia cannot ask the television presenters to slow down when she does not understand a
difficult lesson. A major advantage of the television learning that Peru has supplied, however, is that it has the power to reach more of the billion children worldwide who are shut out of schools by the pandemic (Mueller & Taj, 2020). While the United States does struggle with computer and Internet access and with making online learning more engaging, the challenges for Peru are of a different magnitude. As Peru does what it can to address these challenges, Aprendo en casa does seem to have adopted, across all its platforms, one of the “cardinal lessons of the YouTube era” that other countries have adopted as well: “the shorter and snazzier, the better” (Mueller & Taj, 2020).

Government Funding Sources

Another important difference between the United States and Peru relates to how their governments are structured. Peru’s national education ministry is currently trying to supply content to the whole country to sustain learning during the pandemic. In the United States, by contrast, public education is funded and administered largely at a very local level. School funding in the United States comes from “federal, state and local sources, but nearly half of those funds come from local property taxes, [so] the system generates large funding differences between wealthy and impoverished communities” (Biddle & Berliner, 2002). Peruvian schools, by contrast, are funded by school fees. In 2015, Peru invested about $1,200 per student, with plans to increase that amount in subsequent years (Peru Telegraph, 2018). The average U.S. expenditure per student is $12,612, which is more than triple that of Peru. The amount varies throughout each state in the United States, however. Maryland schools specifically spend $14,762 per pupil, for a total of $13.2 billion annually (Hanson, 2020). For special education funding specifically, the U.S. Department of Education covered 13% of total costs per student in 2020 (National Education Association, 2021). This is the lowest share since 2000. In the 2020–2021 academic year, the shortfall passed on to districts and states after federal assistance was $23.6 billion (National Education Association, 2021). These shortfalls deny full educational opportunities to students with and without disabilities.

Discussion

It is clear from the observations above that Peru and the United States have both struggled to adapt to the challenges of the COVID-19 pandemic while seizing upon certain opportunities to innovate. Both countries are trying in their own ways to make special education as adaptable as possible. Although education in Peru receives far less funding than in the United States, Peru is doing what it can with its available resources, in one case innovating by reverting to an older technology (television), whereas the United States relied more on newer digital tools to create an interactive virtual learning experience.
While special education can look to the full range of emerging technologies to serve learners in post-pandemic digital learning environments, the Peruvian case demonstrates that educators should not overlook older, more analog, technologies for creating access to special education in underserved areas. For instance, Lai and Widmar (2021), among others, document how some rural areas of the United States are still affected by the digital divide, leading to a lack of educational opportunities for those who do not have access to the Internet. Roese (2021) estimates that as many as 30 million Americans in rural areas are currently affected. Fregni (2020) illustrates the ways in which these disparities affect teachers and students in their everyday lives, as well as the strategies the teachers and students develop to compensate, discussing the case of a student who must travel up into the mountains near her house to get clear cell service to do her homework. Other students in the same situation access Wi-Fi at the nearest Subway or visit friends who do have access to high-speed Internet (Fregni, 2020). During the pandemic, sufficient Internet became even more essential for work and school, but it remains till this day unattainable for many U.S. households. Accordingly, policy makers and educators in the United States may have more to learn that would seem immediately apparent from Peru’s approach to meeting the challenges of the pandemic.

The insights derived from this study are still preliminary because of certain methodological limitations that must be acknowledged. Aprendo en Casa is just one dimension of the Peruvian approach to special education, albeit a particularly instructive one. A more comprehensive survey of the Peruvian system would yield additional insights. Likewise, Howard County, Maryland, is only one educational district in a diverse U.S. educational landscape. Comparisons to other parts of the country, as well as more extensive interviews with educators in different contexts, would continue to expand helpfully on the findings of this study. Case studies of other parts of the world, in addition to Peru, would also further understanding of how special education approaches vary from country to country.

Conclusion

In conclusion, the comparison of the United States and Peru reveals how resource and wealth differences have affected but not completely determined strategies for teaching special education students during the COVID-19 pandemic. While Peru’s pandemic response was complicated by resource limitations, we can also see how vastly more resources have not translated to a perfect solution for the United States, either, and how resource shortages have pushed Peruvians to innovate. Future research should examine how instructional practices shift again when students return to face-to-face instruction from online learning. Will Aprendo en casa stop its program, or will it continue to give information to students and parents? Will Aprendo en casa be more economically beneficial to parents who do not have the financial support to send their children to school? Will schools in the United States continue
some part of the online format for some students who do better during online learning? These questions will merit continued examination by comparative scholars of education as the world emerges from the pandemic.
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STRIPPING DOWN SEXUAL SCRIPTS: A SEXUAL ANALYSIS OF FEMALE-AUTHORED NOVELS FROM TIME’S “100 MUST-READ BOOKS OF 2019”

BRENNAL. HAGAN, WIDENER UNIVERSITY
MENTOR: AMY R. FRANZINI

Abstract

Most research on sexual content in the media has focused on visual media such as television and film, often overlooking novels. Likewise, research studies on sexual content have not studied the role of authorship. The pattern of accepted sexual scripts in novels, particularly those written by male authors, and the impact that these scripts have on the reader’s understanding of sexuality and sexual behaviors merits further research. This study analyzed sexual content in eight female-authored literary fiction novels from Time’s “100 Must-Read Novels of 2019.” Results found that fiction novels depict a plethora of sexual behaviors. Across the eight books, there were 642 instances of sexual behaviors, including sexual intercourse (15%), sexual affection (28%), verbal references (46%), and sexual ideation (11%). Of the 99 instances of sexual intercourse, 44% of initiation of intercourse was unknown, 15% was mutually initiated, 23% male-initiated, and 18% female-initiated.

Key words: sex scripts, fiction novels, representations of sex and sexuality in literature

“Even dead, Drenka gave him a hard-on; alive or dead, Drenka made him twenty again. Even with temperatures below zero, he would grow hard whenever, from her coffin, she enticed him like this.”

The above excerpt from Philip Roth’s 1995 novel Sabbath’s Theater (p. 50) describes a sexual encounter between two main characters. This excerpt depicts a traditional sexual encounter, consistent with sexual scripts and scripting theory (Gagnon, 1977; Gagnon and Simon, 1973, 1987; Simon and Gagnon, 1986), in which the male character is aroused and sexually dominant and the female character is depicted as the object of desire, even in her death.

Although sexual portrayals appear in several media types, most research has focused on digital media, particularly television and film. With the growing popularity of fiction novels and the ever-changing world of sexual scripts, fiction novels are an
interesting and important field to analyze when discussing sexual portrayals. Specifically, multiple studies (Kollath-Cattano et al., 2018; Leistner & Mark, 2016; Sun et al., 2014) have acknowledged that media viewing can influence a viewer’s understanding of sex and the viewer’s own sexuality.

According to the Association of American Publishers (AAP) 2019 Statshot Annual Report, the U.S. book industry logged $25.63 billion in revenue. Adult fiction books accounted for $4.26 billion (AAP, 2019). The NPD Group reported that 67% of unit sales for the top 100 fiction novels in 2019 came from books written by female authors. A Statista survey (Watson, 2019) found that 81% of adults aged 18–29 had read a book of any format in the previous year. Gender surveys from Statista (Watson, 2018) found that 11% of U.S. women read 31 or more books that year, compared to 5% of male responders.

RQ1: What are the sexual behaviors of male and female characters in female-authored fiction novels?

RQ2: Do modern-day female fiction authors follow gendered sexual scripts in their novels?

Of all the research already conducted on sexual portrayals and sexual scripts in the media, the main themes that arise concerning the research questions are sexuality in the media, sexuality in novels, sexual characters, sexual scripts, and the role of the author in portraying fictional sexual behaviors.

Sex and Sexuality in the Media

Between 1999 and 2005, the Kaiser Family Foundation released four Sex on TV reports, which collected and analyzed sexual messages and depictions on screen over a composite week sample. In 2005, the fourth installment of the report was released, covering 959 programs from 10 channels, including ABC, CBS, Fox, NBC, and other public and cable channels. The study coded different sexual messages, including sexually suggestive behaviors, talking about sex, and depictions of sexual activity. Seventy percent (70%) of the programs sampled included sexual content, with an average of five sexual scenes per hour (Kunkel et al., 2005).

The most expansive study on sexual scripts on screen (Timmermans & Van den Bulck, 2018) examined the situational context of sexual content for 200 episodes of television and found that 9.14% of scenes included sexual behaviors. Notably, this study analyzed television shows that depicted emerging adults, which provides an updated analysis of media aimed toward or involving adults. Such statistics aid in
understanding the current landscape of media portrayals and assist in analyzing fiction with an adult target audience and adult characters.

Overall research (Dempsey & Reichart, 2000; Kim et al., 2007; Ward, 2003) on American television programming suggests that male and female characters act consistently with gendered sexual double standards. Existing studies (Clawson, 2005) have also found that male characters are often portrayed as sexually dominant and more sexually experienced than female characters.

Interestingly, Timmermans and Van den Bulck’s analysis of casual sexual scripts on screen challenged past research on gendered sexual scripts by finding that female characters (35%) initiated casual sex more frequently than male characters (25%). Researchers also studied mutual initiation (16%) and unknown initiation (26%). This information is particularly relevant for current studies analyzing media and the changes seen in sexual scripts over the years.

Sex and Sexuality in Novels

There has been no sweeping content analysis of novels like the *Sex on TV* report to provide a thorough look at novels’ sexual content. Although research on television provides a basis for studying novels, the research is limited. Current studies (Cabrera & Ménard, 2011; Callister et al., 2012) have looked at the portrayals of sexuality in literature with a focus on romance novels (Cabrera & Ménard) and the influence of young adult novels on an adolescent’s thoughts and behaviors surrounding sex (Callister et al.). No research has been conducted on sexual content in novels outside of the romance genre directed toward adults. The lack of research completed within the past 10 years provides little information to compare to earlier studies.

A content analysis of 20 romance novels found that the number of sex scenes per book ranged from zero to six and that 20% of the books “had no fully described sex scenes at all” (Cabrera & Ménard, 2011, p. 246). Coded characteristics of male (77.3%) and female (86.4%) characters in the sample were found to be consistent with sexual scripts. Likewise, 77.3% of sexual scenes in the sample fit hypothesized sexual scripts, with most sex scenes in novels released between 1989 and 1999 initiated by male protagonists (63%) versus their female counterparts (33.3%) and few examples of mutual initiation (3.7%).

A similar 2013 study by Cabrera and Ménard examined depictions of orgasms in contemporary romance novels. The study looked at book blocks between 1989–1999 and 2000–2009, coding for orgasm type and frequency. The investigation found traditional sexual scripts, with female characters reaching orgasm quickly and descriptions of helpless characters. They also found “no changes in the characteristics of orgasm for male and female romance novel characters” (p. 208).
A 2012 study by Callister and colleagues looking at sexual activity in adolescent novels identified frequent sexual behaviors and physical demographics of sexual characters. The authors utilized the 2005 Sex on TV report to break down 452 acts of sexual content and behaviors into similar groups: sexual intercourse (implicit/explicit), sexual affection (passionate kissing, intimate touching, playful sexual behavior), verbal references (talk about sex, sexually suggestive innuendos, sexual physical description), and romantic sexual ideation (sexual intercourse and sexual affection). These most common types of sexual content were ranked at 37% for verbal sexual content, 31% for sexual affection, 1.75% for ideation, and 12% for sexual intercourse. Interestingly, this study found that female and male characters were equally likely to initiate sex, challenging the expected traditional sexual scripts.

Who Is Having Sex?

The average age for first intercourse by gender in the U.S. is 16.8 for men and 17.2 for women (Centers for Disease Control and Prevention, 2010). More than 50% of respondents aged 18–24 indicated their most recent sexual partner was a casual or dating partner. A similar study (Ueda et al., 2020) of U.S. adults found that sexual inactivity increased among men aged 18–24 years and 25–34 years and among women aged 25–34 years.

With the statistics on the sexuality of the U.S. population revealing little information on sociometric status, attractiveness, and socioeconomic status, looking at fictional portrayals is instrumental in understanding common beliefs and norms about sex, specifically about who is having sex and the opinions that individuals hold against themselves or other sexually active individuals. Callister and colleagues (2012) found that books targeting adolescents averaged 11 instances of sexual content per book. Approximately 64% of the characters who engaged in sexual activities were minors, 23% were adults, and approximately 13% were elderly. Similar studies (for example, Pardun et al., 2005) looking at demographics of sexual characters in literature targeted toward early adolescents found that 76% of sexual relations involved couples who were not married.

Although there is a clear relationship between who has sex and character demographics, studies provide different results, mainly resulting from the fact that researchers are looking at different genres and target audiences for novels. Callister and colleagues’ study (2012), however, suggests that the sexual activity of fictional characters is linked directly to physical attributes, popularity, self-esteem, and socioeconomic status. They found that characters who engaged in sexual behavior were likely to be of “popular or controversial status, physically attractive, and of higher socioeconomic status” (p. 483).

In the portion of Cabrera and Ménard’s (2011) study focused on character analysis, their research shows that the average romance novel character is in his or her
late twenties or early thirties and is “heterosexual, attractive, single, able-bodied, and childless” (p. 244). Attractiveness, in most cases, was often depicted through dramatized versions of attractiveness, such as “ravishingly beautiful or incredibly handsome” (p. 247). Younger (2003) suggests that young adult literature valorizes “monogamy over multiple sexual partners,” putting social constraints on an individual’s sexual freedom (p. 50).

These three studies (Callister et al., 2012; Cabrera and Ménard, 2011; and Younger, 2003) were extremely valuable with coding for the research questions for this study; however, these studies looked at novels from various authors, not solely at male- or female-authored literature. Looking at traditional sexual scripts will help in understanding how gendered authorship plays a role in sexual portrayals.

Sexual Scripts

Gagnon and Simon (1973) and Gagnon (1977) suggest that contemporary sexual scripts function as explicit and implicit rules for sexual behavior and emphasize spontaneity rather than foresight in sexual encounters; in society, men and women conform to complementary but different sexual roles. For example, Gagnon and Simon (1973) found that sexual scripts often depict heterosexual characters engaging in penile-vaginal sex.

Gagnon and Simon’s (1973) scripting theory provides a basis for understanding the different sexual roles that male and female characters play in media. For example, several studies (Frith & Kitzinger, 2001; Rosen & Leiblum, 1988; Wiederman, 2005; Zilbergeld, 1999) have found that gender distinctions appear in the format of sexual goals and motivations, emphasis on relational context, an appropriate level of assertiveness, and focus on the genitalia. Similar research looking at sexual scripts and sexual agency (Cabrera & Ménard, 2011) found that men are expected to be assertive and responsible for their partners’ pleasure, with female characters being more likely than male characters to be the receptive parties for sexual touching above and below the waist (p. 249).

Curtain et al. (2011, p. 53) found that lack of sexual agency can present as less comfort talking about sex and the likelihood of using condoms. Similarly, Greene and Faulkner (2005, p. 241) suggest that the sexual double standard in Western sexual scripts can be associated with less assertiveness in initiating sex and talking about sex or talking during sexual intercourse. Although sexual scripts for men and women and male and female characters differ, there are shared experiences that can be linked to sexual scripts and sexual norms. It is important to note that although sexual scripts have remained over the years, advances have occurred, specifically in the realm of sexual initiation. Although looking at sexual scripts is essential in understanding characters’ sexual behaviors, it is equally important to understand who is writing those scripts.
Male and Female Authors

Callister et al. (2012) suggest that author gender correlates to the prevalence of sexual activity in a novel. For example, their research found that female authors were “more likely to include sexual affection, intercourse, and ideation than male authors” (p. 484). Novels targeting girls were also more likely to include sexual content than those targeting boys or that were non-gender-specific.

Hite’s (1998) research on authorship found that male writers often portray female characters as objects of desire and not as sexual beings (p. 125). Hite also suggests that female authors have been influenced by the surge of feminist consciousness, writing from the woman’s perspective to stray away from being the object of desire and instead of being sexually autonomous themselves (p. 121).

Allison (2014) and Chute (2010) have examined female authors in the graphic memoir space. Allison suggests that “what has been marginalized is brought to the centre and given a privileged place in these stories” (2014, p. 74). The authors studied in Allison’s (2014) essay include Alison Bechdel, Marjane Satrapi, and Tutu Modan, who, she suggests, challenge traditional marginalized themes seen in more popular male-authored graphic novels. Similarly, Chute (2010) discusses the way women’s work, often feminist work, is underrecognized in the comic field. Chute (2010) analyzes the work of Marjane Satrapi and graphic authors who depict the reality of life as females, focusing on factors usually left undiscussed in public discourse.

Although there has been minimal research on the role of authorship in novels, several studies analyzing on-screen representations of women by male directors provide an updated look at how women are portrayed in the media. A content analysis of female characters in 100 top-grossing films of 2018 (Lauzen, 2019) found female characters (47%) were more likely to have known marital status than were their male counterparts (36%). Male characters were more likely to be seen with work-related goals (70% vs. 30%), with female characters seen mainly in personal life-related roles (48% vs. 30%).

For films with one or more female directors or writers, females accounted for 57% of protagonists, 47% of main characters, and 43% of characters with speaking roles. In comparison, in films created exclusively by men, 21% of protagonists, 32% of major characters, and 32% of characters with speaking roles were female.

A study comparing male and female pornography directors (Sun et al., 2008) analyzed 44 of the most popular rented VHS and DVD pornographic titles. Sun and colleagues found that women were more likely to direct scenes containing positive behaviors, including kissing, terms of endearment, and concern for their partner. Notably, male-directed scenes were twice as likely to include aggressive male characters. In female-directed scenes, 60% of aggressive acts were perpetrated by female characters versus 21.3% in male-directed scenes; however, 81.1% of female-
directed aggressive scenes had female perpetrators and female targets. Female targets were often spanked and gagged; degraded by being called “slut,” “whore,” or “bitch”; and almost always (97.3%) responded with pleasure.

**How Past Research Affected the Study**

Lessons and criticisms are taken from existing content-analysis studies of novels and on-screen portrayals (Cabrera & Ménard, 2011; Kunkel et al., 2005) showing that media often adhere to traditional Western sexual scripts; however, similar studies found that female characters in casual sex scripts on screen were more likely than male characters to initiate sex (Timmermans & Van den Bulck, 2018) or were equally likely to initiate sexual activities (Callister et al., 2012), challenging the norm of male initiation. Casual sex scripts also challenge traditional sex scripts, suggesting that sexual acts in committed relationships differ from those between two casual partners.

Few studies analyzing the role of authorship and direction in sexual and feminist portrayals include varying results. Hite (1998) suggests that female authors often set out to write about the body and sexuality from the woman’s point of view as a sexual being instead of the object being desired. Similarly, studies on graphic novels and comics suggest that female authors are more likely to provide realistic representations of sex and feminism; however, Sun et al. (2008) found that female-directed porn did not challenge traditional gender roles and argue that “money, rather than gender, dictates vision” (p. 322). Because of the growing number of realistic sexual portrayals in literature, especially in which female characters break traditional romance scripts or sexual scripts, a multitiered content analysis of female-authored novels was performed to identify scripts and themes.

**Methods**

A content analysis was performed to discover how sexual behaviors and sexual characters are portrayed in novels by female authors. This section describes the research process, including sample selection, unit of analysis, coding instrument design, administration, and analysis.

**Sample**

A sample of eight realistic fiction novels from *Time’s “100 Must-Read Books of 2019”* was chosen. The year 2019 was chosen because research for this project began in November 2020, before lists of the top books of that year were released. *Time’s* list of recommended books was chosen over lists from more literary-focused publications such as the *New York Times* “Critics’ Top Books of 2019” and Goodread’s “2019 Best Books of the Year,” based on the number of recommendations. The *New York Times*
list featured 30 books, half of which were nonfiction. Goodreads included 20 books in their Top Fiction Novels of the Year category. In comparison, Time included 28 novels in the realistic fiction category, providing a larger range of novels for the sample.

Realistic fiction novels were chosen rather than suspense novels and novels set in altered worlds, literature in translation, short stories and poetry, memoir and essays, history and politics, society and science, and true crime and journalism because fiction novels may elicit stronger and more emotional beliefs than nonfiction novels (Goldstein, 2009). The Time website contained the original sample list of 23 female-authored realistic fiction novels (Bajekal et al., 2020).

Fourteen novels were excluded from the sample because Time’s description of them did not include reference to sex, relationships, love, or marriage; they were unavailable to the researcher; or they did not feature young adults, adults, or adolescents as the main characters. The 14 novels removed were Doxology; Ducks, Newburyport; The Dutch House; Girl, Woman, Other; Lost Children Archive; Miracle Creek; Mostly Dead Things; The Other Americans; Searching for Sylvie Lee; Supper Club; The Revisioners; The Shadow King; The Unpassing; and Women Talking. Six novels were unavailable to the researcher: Doxology; Girl, Woman, Other; Mostly Dead Things; Supper Club; The Revisions; and Women Talking. Three novels—The Dutch House, Lost Children Archive, and The Unpassing—feature main characters who are children. Miracle Creek, The Other Americans, and Searching for Sylvie Lee are mystery novels without relationships or sex in the descriptions, and Ducks, Newburyport is written in an untraditional fictional style, formatted as a run-on sentence. After the removal of these 14 novels, the final sample of eight novels included Patsy; Queenie; The Man Who Saw Everything; Fleishman Is in Trouble; Trust Exercise; Red at the Bone; Olive, Again; and All This Could Be Yours.

Unit of Analysis

Because the research question focused on sexual behaviors, the unit of analysis for the content analysis was sexual activities for the eight novels. For this study, sexual activities are defined according to Kunkel and colleagues’ (2005) Kaiser Family Foundation Sex on TV report: any depiction of sexual activity, sexually suggestive behavior, or talk about sexuality or sexual activity.’

Coding Instrument

The coding instrument individually coded each sexual activity or sexual behavior in all eight novels and contained five categories and 21 variables: (1) page number, (2) scene description, (3) characters involved, (4) sexual activity (including 15 variables), and (5) initiator (including four variables). All variables are described below.
Sexual Activity Variables

This section coded four sexual activities and their descriptions: (1) intercourse (explicit intercourse, implicit intercourse), (2) affection (passionate kissing, intimate touching, playful sexual behaviors), (3) ideation (implicit intercourse, explicit intercourse, mild kissing, passionate kissing, intimate sexual behaviors, playful sexual behaviors), and (4) verbal references (implicitly talking about sex, explicitly talking about sex, suggestive innuendos, sexual physical description). Kunkel and colleagues’ (2005) definitions were adapted to fit a sample of books rather than visual samples such as television shows or films. Further descriptions of sexual behaviors were based on Callister and colleagues’ 2012 content analysis study.

Intercourse

Implicit sexual intercourse was coded when sexual intercourse was not literally described but could be inferred by narrative devices, such as descriptions where characters are waking up together and putting on their clothes. Explicit sexual intercourse was coded when there was a literal description of the sexual intercourse.

Affection

Passionate kissing is kissing that conveys a sense of sexual intimacy. Intimate touching includes touching another’s body in a way that is intended to be sexually arousing. Playful behavior includes gestures or conversations meant to arouse sexual interest.

Ideation

Romantic sexual ideation is the term used for fantasizing, formulating plans, or having ideas for romantic or sexual behavior without the action actually being carried out. Ideation was divided into two subcategories: sexual intercourse (implicit and explicit) and sexual affection (mild kissing, passionate kissing, intimate touching, and sexual playful behavior).

Verbal References

Verbal references to sexual activity were coded according to characters talking about sex, characters making suggestive innuendos, or sexual descriptions of or by the character. Talking about sex includes making comments about one’s own or others’ sexual actions, interests, sexual advice, and sex-related crimes. When characters talked about sex they had had or were having, however, this was coded as explicit sexual intercourse. Sexually suggestive innuendos refers to remarks implying a sexual
double meaning in the expression. Sexual physical description is a character’s or the narrator’s description of someone’s body parts or features in a sexually evaluative way.

*Initiator Variables*

The gender of the individual initiating sexual encounters contained four self-explanatory variables, including *male*, *female*, *unknown*, and *mutual initiation*.

**Administration**

All eight novels were read and coded by the researcher, who served as the primary coder.

**Data Analysis**

Data were analyzed using Microsoft Excel.

**Results**

**Frequency and Type of Sexual Content**

RQ1, which asked about the frequency of sexual behaviors in female-authored literature novels, yielded 642 instances of sexual content across eight novels. Novels ranged from having 10 instances as the least sexual content, in *The Man Who Saw Everything*, to having 290 instances in *Fleishman Is in Trouble*, averaging 80.25 instances per book across the sample. These fiction novels depict many sexual behaviors, which can be found in Table 1.

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<th>Type of sexual content</th>
<th>Activity</th>
<th>Number of instances</th>
<th>Percentage</th>
</tr>
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<td>Verbal references</td>
<td>Talk about sex</td>
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<td>Suggestive innuendo</td>
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<td>Sexual physical description</td>
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<td>Total</td>
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<td>Sexual affection</td>
<td>Passionate kissing</td>
<td>48</td>
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<td></td>
<td>Intimate touching</td>
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<td>16.8%</td>
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<tr>
<td></td>
<td>Sexual playful behavior</td>
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<td><strong>Total</strong></td>
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<th>Passionate kissing</th>
<th>11</th>
<th>1.7%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intimate sexual behavior</td>
<td></td>
<td>28</td>
<td>4.4%</td>
</tr>
<tr>
<td>Sexual playful behavior</td>
<td></td>
<td>1</td>
<td>0.2%</td>
</tr>
<tr>
<td>Sexual intercourse</td>
<td></td>
<td>31</td>
<td>4.8%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>71</td>
<td>11.1%</td>
</tr>
</tbody>
</table>

| Grand total               |                         | 642|       |

The most common type of sexual behavior was verbal references, accounting for 46% of all sexual behaviors, most of which were sexual physical descriptions (18%), suggestive innuendos (14%), and talk about sex (13%). The next most common behavior was sexual affection (27%), including intimate touching (16%), passionate kissing (7%), and playful sexual behavior (3%). Sexual intercourse (15%) was next common, including implicit intercourse (1%) and explicit intercourse (14%). The least common behavior was sexual ideation, at 11%, including sexual intercourse (4%), intimate sexual behavior (4%), passionate kissing (1%), and playful sexual behavior (0.1%).

**Intercourse Initiation**

Because of RQ2’s relation to sexual scripts, assessing the initiator of sexual encounters seemed important to understand whether sexual behaviors in the samples were consistent with traditional sexual scripts with typical male initiation. An
an analysis of sexual intercourse instances was coded for initiator as male, female, unknown, or mutual. Of the 99 instances of sexual intercourse identified, unknown initiation was most common (44%), followed by male initiation (23%), female initiation (17.2%), and mutual initiation (15.2%; Figure 1).

Figure 1. Intercourse Initiation

Discussion

This study provides an analysis of sexual behaviors in female-authored literary fiction novels. Almost half of all instances (44%) across the eight novels were verbal references, including talk about sex, sexual physical descriptions, and suggestive innuendos. About another quarter (27%) of instances were of sexual affection, ranging from passionate kissing to intimate touching and playful sexual behavior. Female-authored books in the sample had an average of 80.25 sexual references and/or interactions; however, sexual encounters ranged from 10 in *The Man Who Saw Everything* to 290 in *Fleishman Is in Trouble*.

Across the eight novels, there were 99 instances of sexual intercourse. Of those 99, almost half (44%) had unknown initiation, in which it was not clear which party initiated intercourse. Approximately one quarter (23%) of instances of intercourse were male-initiated, with female initiation occurring 18% of the time.
In summary, the sample of novels did follow traditional western sexual scripts, with male initiation more common than female or mutual initiation. The numbers of instances of female and mutual initiation were close to that of male-initiation instances, suggesting that female and mutual initiation are on the rise and more popular than traditional sexual scripts in which male initiation is more common; however, the number of unknown instances (44%) suggests that although initiation is not clearly stated, there is an opportunity for female or mutual initiation to be shown more frequently in novels.

Findings from this study echo findings from Cabrera and Ménard’s 2011 study, in which they found that between the years 2000 and 2009, the number of male sexual initiations in novels decreased to 31.6%, while female initiation increased slightly to 42.1%, compared to 1989–1999, when male initiation was at 63.0% and female initiation at 33%. Using this past research as a guide would confirm slight increases in the numbers of mutual and female initiation in literature.

While the findings from this study suggest that female initiation may be more common in the future, they still support traditional sexual scripts, because women characters are more likely to be pursued versus being the ones in pursuit. Although looking only at initiation gives us a minimal idea of the use of traditional gender roles in female-authored novels, this is under the assumption that all sexual encounters followed heteronormative expectations of one male and one female character. Likewise, the context of the couples involved would clarify results, factoring in same-sex depictions or relationships involving nonbinary characters. The study on sexual behavior frequency provided results consistent with that of similar studies (Cabrera & Ménard, 2011; Callister et al., 2012).

These findings support Cabrera and Ménard’s (2011) prediction that there will be fewer sex scenes in romance novels, contradicting that romance novels focus mainly on sexual intercourse. Like Callister and colleagues’ (2012) study, which found intercourse to occur 12% of the time, the total number of sexual intercourse instances (15%) was low compared to other behaviors. These findings may suggest that instances of explicit intercourse, in which intercourse is clearly described or stated, may conform to traditional sexual scripts where detailed intercourse, and not a description of intercourse, is not usually shown. More often shown is talking about sex, thinking about sex, and an overall sexual environment in a novel compared to true depictions or instances of sex.

Timmermans and Van den Bulck (2018) found that within romantic relationships on screen, passionate kissing and intimate touching (76%) were seen more than intercourse (24%), and within casual sexual experiences, intercourse was seen more frequently (77%) than other sexual behaviors. Further analysis of the content of relationships in novels studied may align with Timmermans and Van den
Bulck’s findings and confirm the fact that casual sexual relationships challenge traditional sexual scripts.

Strengths and Limitations

The sample in this study was relatively small, consisting of eight novels and 642 sexual encounters. A larger sample of novels would generate a larger sample of sexual encounters and lead to more statistical significance. Studying male-authored novels would allow for comparison with findings from female-authored novels. The study sample consisted of novels published in 2019; however, the time spent writing and publishing a novel must be considered when comparing current and earlier works of fiction. Using novel blocks, similar to the ten-year blocks seen in the research of Cabrera & Ménard, may provide a better overview of changes in sexual scripts and patterns of sexual behaviors.

The sexual behaviors analyzed give us a basic understanding of the frequency of sexual encounters in novels; however, only the initiation analysis provided insight into how novels followed or strayed from traditional sexual scripts. Further analysis of characters and more details on sexual encounters would aid in better understanding of the prevalence or omission of traditional sexual scripts.

Future Research Recommendations

Investigators in this area might want to consider using a mix of female- and male-authored novels to better understand the relationship between sexual script prevalence and gendered authorship. It would be important to compare male- and female-authored novels to achieve statistical significance. It would also be important to use a mix of novels from the years 2010–2021 to get more insight and a larger sample of novels compared to novels published only in 2019. It would also be valuable to have a team of researchers work on this project to ensure coder reliability. Further research on the role of authorship and its impact on the prevalence of sexual scripts and traditional stereotypes would allow for a more well-rounded study when comparing results to previous literature. Investigators should also consider analyzing characters in the novel(s) to understand who is having sex and not only how frequently sex is depicted or described. Further analysis on sexual encounters should include the time of day, contraception uses or lack thereof, and other demographic variables.
References


EXPLORING SOUTH KOREAN NEWSPAPERS’ REPORTING ON IMMIGRATION: A DETAILED CONTENT AND SENTIMENT ANALYSIS

MADELYNN EINHORN, WESTERN KENTUCKY UNIVERSITY
MENTOR: TIMOTHY S. RICH

Abstract

How do South Korean newspapers report on immigration? This paper uses content and sentiment analysis to analyze newspaper articles from four of Korea’s major newspaper outlets. This paper finds that South Korean newspaper coverage is fairly neutral, skewing slightly positive, with coverage consistent over time, and emphasizing the language of trust. The results help determine the influence of South Korean newspapers and the salience of immigration.

Introduction

What explains how South Korean newspapers frame immigration? Although South Korea remains largely homogeneous, recent increases in immigration and population aging suggest that analysis focusing on immigration coverage is necessary. It is unclear, however, whether outlets across the political spectrum discuss immigration in similar terms or show signs of distinct framing based on political ideology. This paper is exploratory in nature, with the ultimate goal to provide some insight on South Korean newspaper reporting on immigration. Overall, I find that South Korean media immigration coverage is fairly neutral and emphasizes the language of trust to describe immigration. Additionally, I find that there is little difference in the main South Korean newspapers, despite their ideological differences, suggesting the media is using little explicit framing.

The media plays an important role in framing how the general public perceives immigration and in illustrating popular public sentiment on the issue, with past research finding that media coverage increases the general public’s emotional response to immigration (Lechele et al., 2015) and even shifts voting patterns (Boomgaard & Vliegenthart, 2007). Many researchers studying immigration have used content analysis, particularly in Western countries, including the United States (e.g., Abrajano et al., 2017; Chavez et al., 2010; Kim et al., 2011; Mohamed & Farris, 2019) and many European countries (e.g., Bauder, 2008; Kalfeli, 2020; Vliegenthart & Roggeband, 2007), overall finding that media reporting on immigration tends to be overwhelmingly negative (e.g., Abrajano et al., 2017; Kalfeli, 2020; Schemer, 2012).
Although content analysis on immigration is prominent, very few researchers have analyzed media reporting of immigration in South Korea. South Korea is a homogenous society, yet immigration has been steadily increasing over the past several years and little has been done to prepare for additional migration (Hong, 2020). Public opinion data have found scant consensus on the issue, with South Koreans’ opinions differentiating based on the type of immigration, and their responses often neutral (Rich et al., 2020). The media has a powerful role in the dissemination and framing of issues, so determining how South Korea’s media discusses immigration is important to uncovering which issues are most salient for immigration integration.

This analysis contributes to the literature by analyzing all the newspaper articles discussing immigration in four major newspapers in South Korea—JoongAng Ilbo, Hankyoreh, the Korea Times, and the Korea Herald—over the course of two years. The newspapers are ideologically diverse, with JoongAng Ilbo traditionally described as conservative, Hankyoreh one of the major liberal newspapers in South Korea, and the Korea Times and Korea Herald fairly moderate. To interpret the data, I used an automated content analysis approach, which used the R statistical software package Syuzhet and allowed me to analyze how positive or negative coverage was, as well as the types of emotional language used to describe immigration. Automated content analysis is increasingly common in academic research and is generally perceived as an ideal way to quickly process large amounts of information (Krippendorff, 2019), particularly regarding immigration (e.g., Greussing & Boomgaarden, 2017; Jacobs et al., 2018; Lind & Meltzer, 2020).

This paper begins by reviewing the literature, analyzing general patterns in content analysis of newspaper reporting on immigration, then looking at South Korean and East Asian research. Second, my research design and empirical results are presented. I collected each newspaper and used a sentiment analysis package to determine perceptions of immigrants. Ultimately, I found little difference in reporting between newspapers and found that coverage is fairly neutral. The paper concludes with the implications.

**Literature Review**

Past content analysis has found several trends in media reporting on immigration. First are ideological differences in reporting, with conservative papers often taking harsher stances on immigration than liberal papers. Fryberg et al. (2011) analyzed newspapers in the United States, finding that conservative newspapers are more likely to characterize immigrants as a threat to the public. Many conservative and liberal papers even discuss entirely different topics on immigration. For example, Merolla et al. (2013) find that farther-right media sources were less likely to write about undocumented immigrants who arrived in the United States as young children. Similarly, Krupenkin and Rothschild (2020) used machine learning techniques to
discover that conservative media sources reported on immigration more often and more negatively after the presidential inauguration of former U.S. President Donald Trump. Immigration is regarded as one of the most salient issues in party identification, suggesting that media reporting can have broader effects on public opinion and voting choices (Abrajano et al., 2017; Hajnal & Rivera, 2014). Although little research focuses on South Korean immigration, past research has found that the media in South Korea is hyperpolarized, with distinct coverage from ideologically different newspapers (Han, 2018).

Second, immigrants are often framed as threats to domestic security. Kim and Wanta (2018) find that most newspapers use what they refer to as the conflict frame, which focuses on the conflict between immigrants and natives, especially regarding crime, often as a method of boosting audience interest for those who enjoy dramatic and sensationalist stories. Farris and Mohamed (2018) found that articles often focus on immigrant crimes, overemphasizing criminal acts and focusing on the necessity of border security. Similarly, Harris and Gruenewald (2020) analyzed major U.S. newspapers, using time series analysis to conclude that there is a significant increasing trend in labeling immigrants as criminals. Such egregious criminalization of immigrants may be limited to the West, however, and particularly the United States, because U.S. reporting increasingly associated immigrants with crime and terrorism after the 9-11 terrorist attacks (Frederking, 2012). Although little research focuses on South Korean newspapers, Ha and Jang (2015) find that some South Koreans view immigrants as a safety concern, causing unfavorable views.

Third, the media tends to negatively report on certain demographics of immigrants, particularly those viewed as undesirable. Typically, the “outgroup” is racially distinct from the host country’s racial composition. Valentino et al. (2013) found that dominant racial groups are particularly intolerant of immigrants who are racially diverse. Mohamed and Farris (2019) explain that newspapers often play up demographic shifts, causing many readers to internalize anxiety over racial or ethnic change. Mastro et al. (2014) find that newspapers rely on subtle intergroup bias, in which coverage on immigration is unfavorable toward minority groups, such as Latinos in the United States. Past content analysis finds that news sources tend to stereotype immigrants and use xenophobic imagery (Mastro et al., 2014; Schemer, 2012); however, Theorin (2019) finds that racialized reporting of immigration has little impact on readers’ attitudes, arguing that right-wing social media is contributing to anti-immigrant sentiment. Many South Koreans are apprehensive of multiculturalism, suggesting that immigrants likely fulfill the role of the outgroup (Lim, 2009).

Fourth, media reporting on undocumented immigrants typically is overwhelmingly more negative than reporting on legal immigrants. Many media sources tend to focus on immigrants’ illegal status (Farris & Mohamed, 2018; Liu, 2019), antagonizing them and emphasizing their burden on society (Mastro et al.,
Steinberg (2004, p. 124) analyzes newspapers and finds that they often refer to immigrants as “illegal” rather than as “undocumented” because “anytime the word ‘illegal’ precedes a word, it implies deviance and breaking the law.” Content analysis of newspapers finds that reporting of undocumented immigrants is substantially more negative than overall reporting of immigrants, even in the same newspaper (Stewart et al., 2011). Little research analyzes media reporting on illegal immigration in South Korea, yet studies interviewing undocumented immigrants in South Korea found that the public simultaneously desires illegal immigrants for their cheap labor and deems them for their undocumented status (Ussasarn & Pradubmook-Sherer, 2020).

Fifth, the media tends to report on the economic implications of immigration. Semetko and Valkenburg (2000) analyze the economic consequences frame, which characterizes how immigration will affect the economy, finding that the frame, whether positive or negative, is relatively common. Similarly, past research finds that the media reports on immigrants with different economic skills in divergent ways, typically praising economic immigrants as vital to the economy (Lawlor & Tolley, 2017) and establishing low-skilled immigrants as fiscal burdens (e.g., Hundt, 2016). In a cross-country study, Avdagic and Savage (2019) determined that many people are less inclined to support welfare when presented with negative economic frames of immigrants. In South Korea, Hundt (2016) found that South Koreans were much more supportive of highly skilled immigrants, such as investors, than of blue-collar workers.

Finally, the COVID-19 pandemic often changed the way that newspapers reported on immigration. Although little research analyzes media framing of immigration specifically during the COVID-19 pandemic, research has found clear shifts in overall reporting. Martikainen and Sakki (2021) found that the press during COVID-19 often stereotyped and demeaned outside groups as a method of reinforcing their own country’s COVID-19 strategy. Other data analyses came to similar conclusions, finding that newspaper coverage tended to politicize coverage and to critique countries or groups viewed as undesirable (Abbas, 2020). Kelbel (2021) analyzed articles from Swedish media sources and found that COVID-19 increased nationalistic and populistic reporting, suggesting that the pandemic intensified negative media sentiment. Lin and Le Pham (2020) looked at articles published in the New York Times since the outbreak of COVID-19 and argued that New York Times articles relied on anti-immigrant sentiment and securitizing immigrants from overseas, particularly China. Content analysis of social media, though not newspapers, found that people were posting more prejudiced comments during the advent of the pandemic, especially comments directed at Chinese individuals (Croucher et al., 2021). Though research specific to South Korea is lacking, cursory research implies that people are more hostile toward immigrants during the COVID-19 era, suggesting that newspaper coverage may also focus on additional negative aspects of immigration.
Although numerous articles have examined newspaper coverage of immigrants in the United States and other Western countries, limited work has been done in East Asia. Comparative research on media reporting of immigration has found major thematic differences even between European countries (Berry et al., 2015), suggesting that coverage in South Korea could differ greatly from that in Western media and even other East Asian countries. Of the few articles focusing on South Korean newspaper reporting on immigration, most have found grudging acceptance of immigrants and multiculturalism (Hundt et al., 2018). Hundt et al. (2019) analyzed South Korea’s print media’s discussion of multiculturalism, finding that left-leaning sources invited migration, while moderate and conservative groups argued that additional citizens could improve the economy.

Other East Asian countries appear to frame immigration similarly. Omoya et al. (2020) analyzed documentaries on Indochinese refugees in Japan and found that although refugees were viewed as outsiders originally, coverage gradually changed to show immigrants as members of the Japanese community. Liu (2019) compared newspaper coverage from the United Kingdom and United States to that of Taiwan and Hong Kong, finding that Taiwan and Hong Kong focused much more on immigrants’ economic contributions and integration and were much less likely to rely on threat narratives. Overall, the limited research on East Asia appears to find that newspapers there discuss immigration more positively than those in Western countries.

This paper is exploratory in nature, with the ultimately goal of providing some insight into South Korean newspapers’ reporting on immigration. Based on the literature, I predict that South Korea’s newspapers will negatively characterize immigrants, especially those typically perceived as less desirable, such as immigrants from racially diverse groups (Valentino et al., 2013), undocumented immigrants (Mastro et al., 2014), and low-skilled economic immigrants (Hundt, 2016). Additionally, I predict that immigrants will often be deemed as untrustworthy, outsiders, and potentially even associated with crime (Kim and Wanta, 2018). I predict that reporting will be less negative than typical Western reporting, however, given that East Asian countries have a more neutral or positive approach to immigration (Hundt et al., 2019; Liu, 2019). I also infer that South Korean reporting during the COVID-19 pandemic will be more negative because the cross-border movement was critiqued for spreading disease and many newspapers grew increasingly nationalistic (Martikainen and Sakki, 2021). Because there is limited content and sentiment analysis of South Korea’s reporting on immigration, however, I have little ability to predict how JoongAng Ilbo, Hankyoreh, the Korea Times, and the Korea Herald characterize immigration.
Research Design and Empirical Findings

To determine how South Korean newspapers frame immigration, I analyzed the articles of four prominent South Korean newspapers: JoongAng Ilbo, Hankyoreh, the Korea Times, and the Korea Herald. I selected these newspapers because they are Korea’s major newspapers and have diverse political affiliations, which allowed me to better capture the differing ideological opinions in Korean society.\(^1\) Specifically, JoongAng Ilbo is traditionally described as conservative, Hankyoreh is one of the major liberal newspapers in South Korea, and the Korea Times and Korea Herald are fairly moderate. Additionally, I focused on the English-language articles, which admittedly likely target a different audience, yet most of these articles are connected to Korean-language papers, suggesting a considerable overlap in messaging.

I searched using the term “immigration” in the search bar of each newspaper from January 1, 2019, through December 31, 2020.\(^2\) Overall, I collected 986 articles in total, with 182 from JoongAng Ilbo, 56 from Hankyoreh, 411 from the Korea Times, and 337 from the Korea Herald (Figure 1). Many articles were not substantively related to immigration to and from Korea, however, so I then narrowed the articles using two criteria:

1. Articles must discuss immigration to and/or from South Korea.
2. Articles must substantively discuss immigration, devoting at least one section in the article to immigration.\(^3\) (For example, I did not include articles that primarily discussed domestic aging and mentioned immigration as a solution only in passing.)

I was left with 270 articles that met these requirements. JoongAng Ilbo had 41 relevant articles, Hankyoreh had 28, the Korea Times had 92, and the Korea Herald had 109. I removed several articles from the analysis because they discussed foreign immigration systems or temporary movement, which is often tourism and not immigration.

Overall, I used 27.4% of the articles that I initially collected, with 22.5% of JoongAng Ilbo’s articles, 50% of Hankyoreh’s, 22.4% of the Korea Times’, and 32.3% of the Korea Herald’s (Figure 2). For each newspaper, a lower percentage of articles from 2020 was included in the analysis, which I assume is because of the large number of COVID-19–related articles referencing immigration code but not substantively

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\(^1\) I originally planned to also analyze Chosun Ilbo, but there were so few search results for the newspaper about immigration that I assumed the search bar provided insufficient results.

\(^2\) I used this time frame because 2020 was the last fully completed year and I could analyze a year affected by COVID-19 to see how it compared to the prior year.

\(^3\) I originally planned to narrow articles by requiring one paragraph to discuss immigration, but some articles had one-sentence paragraphs with one mention of immigration, so I decided to categorize a “section” of the article based on context.
discussing immigration itself. Additionally, the *Korea Herald* and *Korea Times* both report on a multitude of international issues, including foreign immigration systems, suggesting that their article retention rate was low because many articles were not specific to Korea.

Figure 1. Number of Articles Collected, by Newspaper

![Figure 1. Number of Articles Collected, by Newspaper](image1)

Figure 2. Percentage of Relevant Articles, by Newspaper

![Figure 2. Percentage of Relevant Articles, by Newspaper](image2)
R Content Analysis

I analyzed summary statistics for each newspaper, beginning with the 10 most common words\(^4\) in each paper (Table 1). Although the most common words—“Korean,” “immigrant,” and “foreign,” for example—appear often in each newspaper, there are some clear distinctions between newspapers. For example, *Hankyoreh* appears to emphasize the humanitarian elements of immigration, using terms such as “refugee,” “family,” and “father,” while *JoongAng* and the *Korea Times* use words signifying economic frames, such as “workers,” “foreigners,” and specific locations and abstract numbers. Overall, most of the common words appear to be fairly neutral descriptors of immigration, with only *Hankyoreh’s* phrasing suggesting an emotional use of language. The results are surprising, given the emphasis that past literature has placed on associations of immigrants with illegality and crime (Mastro et al., 2014; Schemer, 2012). Potentially, major Korean newspapers report on immigration more neutrally than the American and European newspapers because the issue is less politicized in Korea. Though these are the most common words in each newspaper, they still compose approximately 0.1% or less of words used in the text, meaning there are limitations to what one can conclude from word frequency.

<table>
<thead>
<tr>
<th>Newspaper</th>
<th>Word</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Hankyoreh</em></td>
<td>refugee</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>status</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>Korean</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>immigration</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>Kim</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>family</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>migrant</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>airport</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>international</td>
<td>43</td>
</tr>
<tr>
<td><em>JoongAng</em></td>
<td>Korean</td>
<td>128</td>
</tr>
<tr>
<td></td>
<td>foreign</td>
<td>106</td>
</tr>
<tr>
<td></td>
<td>people</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>workers</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>foreigners</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>country</td>
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<td></td>
<td>one</td>
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<td>percent</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>government</td>
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<tr>
<td><em>Korea Times</em></td>
<td>Korean</td>
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<tr>
<td></td>
<td>immigration</td>
<td>241</td>
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<td>foreign</td>
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<tr>
<td></td>
<td>visa</td>
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<td></td>
<td>government</td>
<td>165</td>
</tr>
<tr>
<td></td>
<td>year</td>
<td>158</td>
</tr>
<tr>
<td></td>
<td>workers</td>
<td>153</td>
</tr>
<tr>
<td></td>
<td>ministry</td>
<td>140</td>
</tr>
<tr>
<td></td>
<td>foreigners</td>
<td>135</td>
</tr>
<tr>
<td><em>Korea Herald</em></td>
<td>Korean</td>
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<tr>
<td></td>
<td>foreign</td>
<td>226</td>
</tr>
<tr>
<td></td>
<td>ministry</td>
<td>200</td>
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<tr>
<td></td>
<td>country</td>
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</tr>
<tr>
<td></td>
<td>percent</td>
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</tr>
<tr>
<td></td>
<td>refugee</td>
<td>183</td>
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<tr>
<td></td>
<td>immigration</td>
<td>174</td>
</tr>
<tr>
<td></td>
<td>number</td>
<td>136</td>
</tr>
</tbody>
</table>

Additionally, I created word clouds for each newspaper to show the 100 most common phrases and words across each newspaper, with word size based on frequency.\(^5\) The word clouds suggest that each newspaper uses relatively similar word

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\(^4\) Words that I felt did not contribute to the overall analysis—such as “South,” “Korean,” “will,” and “said”—were excluded from the frequency tables and word clouds.

\(^5\) I did not clean up the word clouds by taking out variations of words, in order to allow for better analysis of the specific wording used.
choices (Figures 3–6); however, similar to the results shown in Table 1, Hankyoreh uses phrases indicative of a more humanitarian approach to immigration, often using words such as “refugee” and “family migration.” So far, the results of my analysis suggest a limited partisan division between each newspaper, which is surprising, given the important role that ideology is believed to play in immigration coverage (e.g., Fryberg et al., 2011; Krupenkin & Rothschild, 2020; Merolla et al., 2013). Additionally, South Korean newspaper coverage appears not to emphasize undocumented immigrants or border security, suggesting limited criminalization of immigrants.
R Sentiment Analysis

Next, I used the Syuzhet package developed by researchers at Stanford University to associate specific words with certain emotions (Mhatre, 2020) to determine the sentiment patterns in the text. Although the package includes four sentiment extraction methods, all are relatively similar, so I went with the default method of Syuzhet (Mhatre, 2020). The Syuzhet lexicon comprises 10,748 words, which are labeled as positive or negative based on linguistics research and are matched with words in the newspaper text to determine if those words have a positive or negative sentiment, scaled on a scale from 1 to –1 (Naldi, 2019). For example, the word “evil” would be given a very low score because it is an extremely negative phrase. The primary problem with the Syuzhet package is that it does not pick up on modifiers (Naldi, 2019). For example, the package would categorize the phrase “immigrants are not scary” as negative because the package focuses on the word “scary” and ignores the modifier “not.” Although the package is imperfect, past research has found that other packages that check for modifiers often have similar results (Hoffmann, 2018), and Syuzhet is often cited in academic literature (e.g., Hoffmann, 2018; Hynninen et al., 2020; Valdivia et al., 2017) and is viewed as a useful method for conducting sentiment analysis. I used this package in several ways to analyze patterns in South Korean newspapers on immigration reporting.

Finally, the Syuzhet scores suggest fairly similar and neutral coverage. Each newspaper has the same median (0) and very similar mean scores (Table 2). Only Hankyoreh has a negative mean, and the Korea Times has the highest mean (0.111). Clearly, the tone is fairly neutral in each paper. The papers have fairly different minimum and maximum scores, however, suggesting different levels of variance in each paper. The Korea Herald has the lowest score (−8.6) and the highest score (6.45), while Hankyoreh varies the least, with a minimum of −3.25 and a maximum of 3.1. This analysis demonstrates the importance of looking deeper into sentiment trends in Korean newspapers because although coverage may tend to average similarly, each newspaper uses distinct levels of emotions when discussing certain issues.

Table 2. Syuzhet Scores by Newspaper

<table>
<thead>
<tr>
<th>Newspaper</th>
<th>Min</th>
<th>Median</th>
<th>Mean</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hankyoreh</td>
<td>-3.25</td>
<td>0.00</td>
<td>0.00</td>
<td>3.10</td>
</tr>
<tr>
<td>JoonAng</td>
<td>-6.40</td>
<td>0.00</td>
<td>0.08</td>
<td>5.45</td>
</tr>
<tr>
<td>Korea Times</td>
<td>-3.45</td>
<td>0.00</td>
<td>0.11</td>
<td>3.85</td>
</tr>
<tr>
<td>Korea Herald</td>
<td>-8.60</td>
<td>0.00</td>
<td>0.07</td>
<td>6.45</td>
</tr>
</tbody>
</table>
I next graphed tone over time for each newspaper. The emotional valence scale quantifies the magnitude of emotional response, and the narrative time provides the number of words for each newspaper (e.g., the Korea Times has the most and longest newspaper entries, so its narrative time is the longest). Despite having a consistent mean of about 0, each newspaper has very distinct-looking sentiment patterns (Figure 7). JoongAng appears to have highly emotional coverage of issues, with large spikes of positive and negative sentiment over time. Hankyoreh appears to have fairly variable coverage on immigration, with holistic shifts up and down. The Korea Times’ coverage is often neutral, with a lot of data close to the mean, and relatively few outliers. The Korea Herald has quite variable coverage, with one extreme negative outlier near the beginning of data collection. Of course, this sort of analysis cannot necessarily determine whether coverage of immigrants is positive or negative but rather can help understand aggregate trends in sentiment reporting of immigration and variation over time.

Figure 7. Newspaper Sentiment Over Time
Next, I determined the specific emotions identified in each newspaper. The Syuzhet package goes beyond only positive and negative labeling, also determining if words in a text use language denoting anger, anticipation, disgust, fear, joy, sadness, surprise, and/or trust (Kelbel 2021; Mhatre, 2020). Overall, each newspaper used the language of trust most often. Although this does not necessarily mean that the newspapers are explicitly telling viewers to trust immigrants, it shows that the newspapers rely on trustful language when discussing immigration. Similarly, fear and anticipation seem to be common themes in each newspaper, suggesting that the newspapers are discussing immigration in complex ways. Anger and disgust seem relatively uncommon in each newspaper, and both are rather extreme emotions, so possibly, coverage tends to avoid very strong negative language.

Each newspaper had a different number of articles being analyzed, and thus a different word count, so I also broke down each newspaper by the percent of each meaningful word in the document that is associated with a specific category of emotion (Figure 8). In JoongAng Ilbo, approximately 27% of the words relate to trust, 17% to fear, 16% to anticipation, 12% to sadness, 11% to joy, 8% to anger, 6% to surprise, and 5% to disgust. In Hankyoreh, about 25% of the words relate to trust, 17% to anticipation, 16% to sadness, 14% to fear, 12% to joy, 9% to anger, 6% to disgust, and 5% to surprise. In the Korea Times, around 28% of the words relate to trust, 17% to fear, 16% to anticipation, 12% to sadness, 12% to joy, 7% to anger, 6% to surprise, and 4% to disgust. Finally, in the Korea Herald, approximately 25% of the words relate to trust, 17% to fear, 14% to anticipation, 12% to sadness, 11% to joy, 9% to anger, 6% to surprise, and 5% to disgust. Each newspaper tends to use similar emotions when describing immigration, but there are still some nuanced differences in reporting. For example, Hankyoreh is much more likely to use language related to anticipation, suggesting that the newspaper might positively discuss immigrant arrival, consistent with its overall liberal reporting.
Overall, each newspaper seems to have moderately positive or neutral reporting of immigration, often using language such as “trust” or “anticipation,” suggesting that coverage is more positive and less partisan than one would expect. Although newspapers could sometimes be referencing trust in law enforcement to respond to immigration, or other similar narratives, the trend likely means that South Korean newspapers tend to present immigrants as trustworthy. The newspapers also often reference anticipation, likely suggesting immigrant excitement or Korean desire for immigration; however, the newspapers also often use language that speaks in fearful terms, which could reference the fear that immigrants experience while coming to or in Korea, or the fear that Koreans experience because of immigration. Although it can be difficult to determine how sentiment narratives are applied to specific newspapers, this analysis lays the groundwork for determining important patterns in South Korean reporting of immigration.

Robustness Checks

Finally, as a robustness check, I ran two other sentiment packages that come with the Syuzhet package—Bing and AFINN—which return means that are similar to the Syuzhet package for each newspaper. The Bing package comprises 6,789 words, including 2,006 positive words, and categorizes words as either −1 or 1, so there is no coding for neutral words (Naldi, 2019). Similarly, the AFINN package includes slang words and comprises 2,477 words, including 878 positive words, and its scale is broader, categorizing each word on an 11-point scale from −5 to 5 (Naldi, 2019). These
three text sentiment programs are some of the most used in sentiment analysis because they have the largest dictionaries of words to draw analysis from, helping ensure accurate results.

**Conclusion**

Many Western newspapers characterize immigrants negatively (Abrajano et al., 2017; Kalfeli, 2020; Schemer, 2012), yet such a trend does not appear to apply to South Korea. This paper analyzed the reporting on immigration from JoongAng Ilbo, Hankyoreh, the Korea Times, and the Korea Herald, finding that it tended to be fairly neutral, or slightly positive, with little impact from partisan reporting in newspapers. None of the newspapers focused on undocumented immigrants, instead appearing to report on the economic and humanitarian characteristics of refugees. Sentiment analysis finds that most of the newspapers described immigrants using the language of trust and anticipation while deemphasizing language of disgust and surprise. Although all four newspapers had similar trends in reporting, each had slightly different emotional narratives and patterns in reporting.

Considering that the major South Korean newspapers are fairly similar and neutral in reporting on immigration, there is little message urgency conveyed to South Koreans. Thus, the newspapers I analyzed are likely focusing on quick and factual coverage, rather than detailed analysis on immigration. South Koreans are likely not forming strong opinions on immigration because of what they read in the news, and immigration is likely a low-saliency issue. Immigration numbers in South Korea are rising, and the country will soon experience a worker shortage, suggesting that South Koreans should focus more on immigration as their country becomes increasingly multicultural (Kuhn, 2021). This paper finds that immigration appears not to be a “hot-button issue” in South Korea and that the government will need to change this should it want smooth immigrant integration into society and the workforce.

Although this paper provides one of the first analyses of media reporting on immigration in South Korea, there are many limitations, and many avenues for future work. First, this paper is limited because aggregate content analysis looks at overall trends, which can sometimes oversimplify complex analysis. For example, I found that South Korean newspapers often used trusting language in articles about immigration, but I do not know how often that language is used to refer to immigrants, the government, law enforcement, or other organizations. Additionally, I could not directly determine if such trust language was generally more common in Korean papers regardless of topic. Future analysis could look further into how language is applied in South Korea more broadly and specifically to immigration.

Second, past content analysis has found regional deviation in reporting (Branton & Dunaway, 2008, 2009), suggesting that analyzing local papers in South Korea could determine whether this pattern holds for the country. Third, past
research has found that each section of a newspaper reports on immigration differently. For example, Silva and Flynn (2020) found stark differences in the commentary and opinion sections’ reporting on immigration. Future research could seek to look at the different sections of South Korean newspapers to find a difference. Finally, Korean-language news may differ from their English-language coverage in terms of tone and frequency of the issues that are covered, although many of the articles are merely translated to English and themes tend to be similar.
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CULTURAL, POLITICAL, AND CHOREOGRAPHIC DEVELOPMENTS OF FEMINISM IN CLASSICAL BALLET

LYDIA MARIYA WIRTH, BUTLER UNIVERSITY
MENTOR: SUSAN MCGUIRE

Abstract

This paper explores how the ballerina can be better represented in the culture, aesthetics, and politics of ballet. Despite the patriarchal and misogynistic traditions that this art form is steeped in, women have made significant strides in reclaiming ballet as a tool of female empowerment rather than of suppression or objectification. A disparity of leadership positions, a traditionally disempowering training system, misogynistic ballet narratives, and patterns of abuse and harassment all combine to create a world that disempowers female dancers on multiple levels. Despite these realities, women have been at the forefront of narrowing wage and opportunity gaps, encouraging transparency about mental and physical health, speaking out against harmful power dynamics, and creating ballets that tell a more complete story of the female experience. This thesis aims to emphasize the work that is being done to remedy these systemic issues, while also further exploring the question of female empowerment through the ballet technique. In conjunction with the research that was done into the broader topic, I created a full-length piece designed to illustrate the process by which the ballet technique might be able to serve the ballerina herself, rather than the man who constructed her. This collaborative choreographic process incorporated inspiration from several other choreographers who have also grappled with the topic of female representation through ballet movement. I aimed to collaborate with my dancers to portray the intrinsic strength of the ballerina and the freedom of artistic expression that can be found through the technique.

Introduction

“Ballet is woman.” This George Balanchine quote is an iconic catchphrase that has come under great scrutiny by women of various standings in the ballet community as it becomes increasingly clear that, in fact, ballet is “a woman made by a man” (Peters). Choreographer Pam Tanowitz is credited with first articulating this important distinction in a 2016 New York Times article. In several different facets—administrative, physical, artistic, historic—women exist at a disadvantage in the ballet world; nonetheless, over time, women have, in all of these areas, made massive strides in reclaiming and equalizing the ballet world.
The first and most important step to diminishing the sexist tendencies in ballet is to recognize that they are problems that need to be fixed. Many people in this art form remain resigned to the facts that demonstrate inequity as inevitable necessities rather than adaptable cultural markers. In a 2017 Facebook post, dancer and choreographer Alexei Ratmansky controversially captioned a photo: “Sorry, there is no such thing as equality in ballet: women dance on point, men lift and support women. women receive flowers, men escort women offstage. not the other way around (I know there are a couple of exceptions). And I am very comfortable with that” (Ratmansky). This comment incited very justified anger from both men and women who aren’t comfortable with the ramifications of such casual misogyny.

Although few men tend to be quite this candid or brusque, inaction by those in positions of power reflects a similar message of indifference. In a 2017 article on reinvigorating ballet, Christopher Wheeldon commented on gender inequality in the dance world: “There is such an obvious imbalance. I’m not sure why it exists and persists. In my experience, directors today are seeking diversity and would love to present the work of female ballet choreographers, so I don’t think overt misogyny is at work” (Sulcas, “A Conversation”). Whether or not explicit sexism is still at play, women are still at a distinct, undeniable, and problematic disadvantage within several dimensions of the ballet world. Nonetheless, it is true that great progress is being made toward true gender balance and equality.

Although women still hold statistically fewer powerful positions in the ballet world, they are quickly shrinking the gap between themselves and male artistic directors, executive directors, and choreographers. Despite a traditionally disempowering training method, many female students are managing to disregard an indoctrinated feeling of subservience and are breaking through the glass ceiling. Although objectification and sexual assault are grim, ever-present realities of ballet tradition, women are slowly beginning to find the strength to speak out against abuse and harassment. From multiple directions, the culture of objectification, dehumanization, and oversexualization is slowly dissipating. Dancers and choreographers are beginning to reject sexist conventions of the ballet technique while also addressing mental health, eating disorders, and poor self-image. In this way, students are beginning to deinternalize any sense of dehumanization or objectification that can leave them more vulnerable to abuse. Even as the ballet technique advances and increasingly showcases the strength of the ballerina, women are constrained by a technical and narrative tradition that was designed to satisfy men. Fortunately, the narratives of new ballets are increasingly being revised and replaced for the sake of painting a more complete story of womanhood. With this thesis, I wanted to illustrate that ballerinas are making progress toward comprehensive gender equality in these various areas. Specifically, I wanted to create a piece to illustrate the process by which women are reclaiming the ballet technique to represent their own experiences and perspective.
Research and Background

Positions of Power and Statistical Inequalities

The Dance Data Project is an online resource dedicated to promoting equity in classical ballet. This annual compilation of statistics reveals that progress has been made but that there is still a real, demonstrable disparity in the approach to gender equality in ballet. Looking primarily at the top 50 American ballet companies—defined as those operating with the greatest expenditures—the Dance Data Project found that in the 2019–2020 season, men choreographed 72% of works. Specifically looking at full-length world premieres, men choreographed 83% of works by major American ballet companies during the 2019–2020 season (2019–2020 Season Overview).

This lack of representation is as much a problem executively as it is artistically. In looking at the boards of trustees and directors at major ballet companies, the disparity in female representation becomes even clearer. In the top 10 American ballet companies, 70% of board chairs are male (Boards of Directors & Trustees). Additionally, the issue of unequal pay has not spared the world of classical ballet, even for women in positions of power. Not only do women only hold 25% of artistic director positions within the top 50 American ballet companies, but those female artistic directors earn, on average, 63 cents for every dollar a male artistic director makes (Artistic and Executive Leadership Report 10); as of 2018, female executive directors earned only 83 cents for every dollar that men earned in these same positions (Artistic and Executive Leadership Report 15).

Although women make up 71% of the ballet world (“Dancers and Choreographers”), they typically only fill the roles of dancer, performer, teacher, and ballet mistress. They are rarely granted the opportunity to express their unique artistic voices in powerful positions such as choreographer or artistic director. Rather, their skills and expertise are consistently employed, and perhaps exploited, in more traditionally feminine roles. In fact, within the schools and academies associated with the top 50 American companies, 77% of the faculty members are female. Of those women, 85% are in “non-titled” positions, meaning that they are “independent contractors or ‘gig workers’ and are less likely to have the benefits or job security afforded to permanent faculty members with titles” (Artists and Other Cultural Workers).

These problems are certainly not limited to leadership positions within the dance world. A 2016 study found that, on average, women in the arts earn approximately $20,000 less per year than their male counterparts (Kaplan). Considering that 46% of dancers and choreographers have incomes at less than twice the poverty threshold, this paints a grim image of how the work of dancers, particularly female dancers, is valued (National Endowment for the Arts).
Statistics don’t reflect the even bleaker reality in which many dancers are expected to work and perform for no pay at all. Often, companies simply cannot afford to pay all of their dancers, and unpaid apprenticeships and traineeships are typically considered part of the pecking order of the professional world. Being unable to stand up for herself and to even ask to be paid for her work only furthers a dancer’s sense of being replaceable and undervalued, however. The issue is succinctly captured in a 2018 *Dance Magazine* article: “Dancers deserve to get paid for their work. I wish I knew how to make this a reality for all artists today as well as the next generation. We as dancers should know our worth. The only way the outside world will respect us is if we respect ourselves first” (Anonymous).

While these problems are well illustrated in the professional ballet world, discrepancies in training for boys and girls lie at the root of larger, systemic inequalities. Robin Lakes, a University of North Texas professor whose research focuses on dance pedagogy, explains, “The dance world has held on to a pedagogical method that disempowers the dancer before sexual abuse would even occur” (Wingenroth). Ballet training is founded on principles of discipline, routine, and tradition. Unfortunately, those principles can sometimes cross a line, straying into territories of authoritarianism and repressed individualism. One recent study suggests that because of “authoritarian methods in training dancers and directing rehearsals . . . women in particular suffer from the demeaning treatment and implicit approbation of voiceless, docile bodies inherent in such disciplinary regimens” (Meglin and Matluck Brooks 3). From a young age, female dancers are told, either explicitly or by implication, to be quiet and obedient if they want to be successful. “Girls are trained to be the perfect third swan on the left, to stay quiet and be ‘good girls,’ to fit in and show no personality of her own” (Basco). Young girls internalize the idea that their role is uncreative performer rather than revolutionary leader.

In contrast, young boys, as a marginal population within the dance community, internalize a very different message about their potential. Within schools and academies, boys are regularly given preferential treatment financially, during class, and for performances. Of course, much of this stems from the scarcity of male dancers at both academic and professional levels. As they are more sought after, they are given more scholarships, more attention from teachers, more soloist roles, and, ultimately, better and better-paying jobs. “Even when they’re teenagers and in school, the boys get the scholarships, are feted, are courted. . . . The boys are coddled, but the girls . . . know that if they speak up or show individual personality, they’ll be replaced” (Basco). Although this trend might seem like a necessity of the field, it also puts women in the demoralizing position of constantly feeling disposable. Men are trained to believe that they are individually important within the dance world, which bolsters their confidence to go on to become artistic directors, choreographers, and other leaders within that world. This automatically puts women at a disadvantage in any pursuit of leadership roles in the ballet world.
The specific issues facing women in the ballet world are furthered by larger, societal stereotypes about gender and leadership. “Competitive, self-confident, objective, aggressive, ambitious, and able to lead” (Defrank-Cole and Nicholson 86) are some of the qualities most often associated with leaders. Unfortunately, these qualities are often considered incompatible with the expectations of femininity placed on women, particularly ballerinas. To break from the traditional feminine quality of a ballet dancer threatens the way a woman is perceived as a dancer and also makes people less likely to view her as a competent leader. “Could it be that the ethereal dancers are deemed ‘not aggressive enough’ to lead?” This question, which confronts every powerful woman in ballet, indicates an inaccurate cultural belief that one cannot be both capable and feminine, influential and nurturing, or authoritative and beautiful.

Examples of and Attitudes Toward Female Leaders

Despite the barriers and challenges that confront women in the ballet world, there are countless examples of women who prove that these trends are changing and that women are slowly gaining the recognition and opportunities they deserve. Artistic directors Lourdes Lopez of Miami City Ballet, Julie Kent of Washington Ballet, and Victoria Morgan of Cincinnati Ballet are just a few examples of women who have risen to positions of power. Many companies are also beginning initiatives designed to showcase and highlight women. Projects such as Boston Ballet’s ChoreograpHER Initiative and American Ballet Theatre’s Women’s Movement are providing increased opportunities for female choreographers (Basco). Many companies, including English National Ballet, Carolina Ballet, and Tulsa Ballet, have presented all-female bills designed to showcase the work of female choreographers. Patricia Baker, artistic director of Royal New Zealand Ballet, planned a 2020 season made up exclusively of works by female choreographers. These included works and productions by Danielle Rowe, Annabelle Lopez Ochoa, Kiara Flavin, Andrea Schermoly, Sarah Foster-Sproull, Twyla Tharp, Alice Topp, and Penny Saunders.

Individual women are also finding ways to highlight female choreographers and to encourage future generations of women. Ashley Bauder commissions pieces by female and marginalized individuals through her arts collaborative, the Ashley Bauder Project. Misty Copeland created Project Plie to promote ballet to children who are currently underrepresented in the art form, encouraging diversity of gender, race, and socioeconomic status (Defrank-Cole and Nicholson 79). In 2013, educator, advocate, and choreographer Sandra Parks founded Women in Dance, which hosts biennial international leadership conferences designed to expand the voices of female dance artists by giving them a more visible platform (Women in Dance). And although women created only 26% of all works in the 2019–2020 season, that was up from only 17% in the 2018–2019 season. Change is clearly occurring slowly, but in meaningful increments. Women in powerful leadership positions are continuously empowering
other women by showcasing their work and encouraging them to take initiative within the ballet world.

Despite these very promising examples, the unfortunate reality is that women who do manage to break past the glass ceiling of the ballet world are still faced with biases and prejudice. A 2010 panel that included women such as Stoner Winslett, artistic director of the Richmond Ballet, and Victoria Morgan, artistic director of Cincinnati Ballet, discussed the “boy’s club” attitude that women often confront in meetings and conferences, especially when they first assume leadership positions (Meglin and Matluck Brooks 2). It is still too much of a novelty for women to be in these types of powerful positions, and it needs to become as normalized as it already is for men. A 2016 journal article on female leadership in ballet describes a glass cliff that women sometimes experience. This refers to the idea that their reputation in that position might be more precarious or risky than it is for men: “Women who want leadership roles sometimes have no choice but to take posts that are somewhat less desirable due to significant issues, such as financial troubles. However, they may be blamed for poor performance when the damage was done before they actually took on the mantle of leadership” (Defrank-Cole and Nicholson 82). In other words, women aren’t given the luxury of being selective or picky about the positions they are awarded, which can ultimately reflect poorly on them. Because these women are often tokenized in largely male-dominated environments, they are also given the pressure of representing and embodying all women. This makes it virtually impossible for women to fail, for fear of proving that misconceptions about female leaders are actually accurate. Many women are therefore put in the stifling position of having to take any opportunity that’s given them while also needing to fulfill the position of artistic director or executive director without mistake or flaw. Although women in these positions are at the forefront of any feminist victories within the ballet world, a truly equal system would not place them in such precarious positions.

Sexual Exploitation, the Female Body, and the #MeToo Movement

History of Female Representation

Ballet began in the Renaissance courts of Italy and France, where it was a symbol of the aristocracy and highlighted male dancers, particularly Louis XIII and Louis XIV, who epitomized French noble dancing. During the French Revolution, ballet was disparaged as a symbol of the aristocracy, and the male ballet stars of the court were replaced by romantic, sylph-like female dancers. Revolutionary female dancers such as Marie de Sallé and Marie-Anne de Cupis de Camargo largely directed the revolutionary dance reformation of the early 18th century by rejecting aristocratic regulation and the hierarchy of French court dance. These women, alongside others such as Françoise Prevost and Marie-Madeleine Guimard emphasized sensuality, femininity, and technical virtuosity in performing noble steps. As ballet d’action began
to take the place of court dancing, the impressive artistry and athleticism of these women redefined 18th-century ballet as a feminine art.

In the following century, Romantic ballet, defined by the supernatural, the exotic, and the ethereal, began to develop in France. The creation of the early pointe shoe literally elevated women such as Marie Taglioni, Carlotta Grisi, Lucille Grahn, and Fanny Ceritto to an otherworldly, revered status. The Romantic ballerina was depicted as fleeting, powerful, and seductive in ballets such as Taglioni’s *La Sylphide*, Perrot’s *Pas de Quatre*, and Perrot and Coralli’s *Giselle*. The women in these ballets captured the hearts of their male counterparts on stage, as well as those of their adoring fans in the audience; however, their prestige on stage was marred by the darker reality of courtesanship at the Paris Opera: “Sex work was part of ballerinas’ realities during the 19th century, an era in which money, power and prostitution mingled in the glamorous and not-so-glamorous backstage world of the Paris Opera” (Blakemore). Although there was great empowerment in the liberal boldness of this revolutionized ballet, it came with the sacrifice of degradation for these ballerinas who relied on wealthy men for financial support. Notably, the Impressionist painter Degas painted and sculpted a behind-the-scenes look at these Paris Opera ballerinas and the lewd men who preyed upon them.

In the second half of the century, ballet began to become an increasingly globalized art form, and women such as Carlotta Brianza and Virginia Zucchi performed ballets such as *Coppelia*, *The Sleeping Beauty*, *La Esmerelda*, and *Swan Lake* across Europe. Airy Romantic tutus were slowly shortened into pancake tutus, giving women more freedom of movement. Petipa, Cecchetti, and Bournonville began creating iconic classical ballets that demanded impressive strength and athleticism from dancers. The librettos of these ballets revolved around a female protagonist but always placed her next to a male lover, hero, or villain who drove the plot: “It’s Petipa’s stage drama that shows us what’s at stake: a society in which men honour women, support women, frame women. He makes that seem the cornerstone not only of ballet but of psychology and civilization, too” (Macaulay, “Is Classical Ballet Sexist?”).

As ballet moved throughout the Continent and to Imperial Russia, Sergei Diaghilev’s Ballets Russes became the hotspot of 20th-century ballet. Anna Pavlova, Olga Spessivtseva, and Tamara Karsavina performed groundbreaking works by choreographers such as Petipa, Fokine, Nijinsky, and, importantly, Nijinska. Bronislava Nijinska had a successful career as both a dancer and choreographer and is remembered for works such as *Les Noces* and *Les Riches*. As the only female choreographer at this renowned company, she set a revolutionary precedent.

Meanwhile, in London, Marie Rambert, Ninette de Valois, Alicia Markova, and eventually Margot Fonteyn spearheaded the development of British ballet. Back in Russia, dancers and choreographers including Pavlova, Mikhail Mordkin, Adolph Bohn, and Leonide Massine defected and began bringing ballet from the Ballet Russes
to the United States. The New York City Ballet, American Ballet Theatre, and San Francisco Ballet Company are all direct descendants of Diaghilev’s legacy (*Descendants of the Ballet Russes*).

Despite various contributing influences, Balanchine is credited as the father of American ballet. Along with Lincoln Kirstein, he founded both New York City Ballet and the School of American Ballet. His prestige is marred, however, by stories of how he treated women and by his legacy of misogyny and body shaming. The women in his ballets were the stars and the centers of attention but were limited to portraying a very small scope of the female experience: “Even in Balanchine’s many plotless ballets, men tend to be consorts and cavaliers, while few of his women—with or without stories—are wives, fewer are mothers, none work for a living, few seem trapped by their societies. And where the man is an artist, the woman is his muse; the roles may not, for Balanchine, be reversed” (Macaulay, “Of Women, Men”). As much as Balanchine revered women as the stars of his ballets, his treatment of them was deeply tinged with objectification and overssexualization. He had sexual relationships with many of his dancers and married four of them, normally around the time that they turned 21. He gave his favorite ballerinas distinctive perfume scents so he could recognize them in and out of the studio. He would remove dancers from roles if they refused his advances and openly discouraged dancers from getting married or having children (Steichen). He would openly critique the bodies of his dancers, one of his most famous quotes stating that in a ballerina, he “must see the bones.”

From a modern perspective, all of these behaviors are clearly predatory and sexist; however, “Mr. B’s” cult-like present-day enthusiasts tend to ignore these failings in their reverence of his artistic work. Ignoring and normalizing these actions and continuing to idolize Balanchine, however, makes it much easier to excuse similar present-day behaviors as traditional. By protecting Balanchine’s lineage, his successors, including Peter Martins, felt protected to practice similarly abusive tactics.

Balanchine’s methods of sexual and psychological manipulation were particularly abominable, but many of the male icons of the 20th-century dance world are remembered as abusive. “Jerome Robbins was known for his temper (one scholar mentioned he threw chairs at dancers), and Antony Tudor would intentionally humiliate performers during rehearsals. Far from expunged from dance history, all three men are icons” (Villarreal). It is very possible to admire and perform the work that these choreographers created without glorifying the men themselves. By openly condemning the behaviors of predatory men throughout ballet history, the culture of the dance world will be able to grow and evolve away from these traditions.

As the broader culture of American dance began to develop, many women found great success in portraying the female experience through dance techniques besides classical ballet. The biggest example of this is the feminist approach taken by
many modern dancers in the 20th and 21st centuries. Unlike ballet, the modern dance movement “cuts through directly to the source of all dancing… to convey through movement the most intangible emotional experience. This is the prime purpose of modern dance, it is not interested in spectacle” (Copeland). Martha Graham, Isadora Duncan, Agnes de Mille, Ruth St. Denis, Doris Humphrey, and Mary Wigman were all powerful women in the modern dance world who used dance to express ideas, thoughts, and emotions that ballet had not yet begun to delve into. Instead of using certain techniques to portray these ideas, these women used their own bodies as material by moving in ways that felt natural, free, and strong. Duncan in particular is associated with having rejected ballet as restrictive and patriarchal: “She will dance not in the form of a nymph nor fairy nor coquette but in the form of a woman in her greatest and purest expression” (Craine and Mackrell). Duncan’s work was intended to dissolve the body entirely, making it genderless and sexless, while also focusing attention on the soul and inner self. Martha Graham also created countless works that told the internal stories of female characters. The women she presented on stage were based on strong women from history and mythology and were portrayed as complex and multifaceted, capable of the whole of human experience. Just a few examples are Medea in Cave of the Heart, Jocasta in Night Journey, the Bronte sisters in Deaths and Entrances, and Joan of Arc in Seraphic Dialogue. Meanwhile, Katherine Dunham, as a champion of black feminism, used dance as activism to bring attention to the racism and sexism of America in the 1940s and 1950s. All of these women aided in reframing the perception of the female body as well as the various capacities of the dancing body.

Postmodern choreographers such as Yvonne Rainer and Trisha Brown worked with minimal, pedestrian movement, often creating identical choreography for men and women, and postmodernism relied on the idea that anyone can choreograph and anyone can dance. The movement began to erase the very idea of gender in dance, as women partnered and lifted other dancers, movement was often identical regardless of gender, and heteronormative costuming, stage placement, and other conventions were done away with entirely. People such as Twyla Tharp began introducing more-innovate and less-normative works and ideas to ballet companies. Tharp crossed ballet with jazz, musical theater, and modern dance to create dozens of pieces that are still performed today by companies around the world, including her own, which she founded in 1965. Pina Bausch was instrumental in the creation of German Tanztheater, a blend of movement, sound, and art. She created infamous works designed to challenge spectator and dancer alike. She emphasized improvisation, relationships, and gender dynamics in her work and is credited as one of the most influential choreographers of the 20th century. Companies such as DV8 Physical Theatre and Urban Bush Women further experiment with movement today, incorporating studies into race and sexuality to express the diversity of the female experience.
These approaches have all been very effective in portraying empowered women and are certainly foundational to the burgeoning feminist movement in the ballet world; however, the female experience is not monolithic, and I believe that ballet, with its structure, elegance, and femininity, can also provide a glimpse into a different, but equally profound, share of the complete human experience.

Self-Image and Physical Maturation

For female dancers, the political and cultural reality of the female body intersects with the reality that “any exchange about a dancer’s body, whether it takes place on or off the job, relates to work…. Her body is inseparable from her work” (Kourlas and Burke). This reality is an element of ballet that is often detrimental to a female dancer’s self-image, skewing her approach to training, damaging her mental health and further solidifying gendered power dynamics. Whether one is portraying the ephemeral, sylph-like eroticism of classical ballerinas or the extended, unemotional lines of a Balanchine ballerina, the expectations for female ballet bodies are made clear from a young age. With up to 70% of professionals being delayed in maturation, there is a well-established preference for later-maturing dancers. “Later maturation in female ballet dancers has been associated with greater psychological well-being, while earlier maturing female dancers report greater incidences of disordered eating, negative body image and higher psychopathology.” In a qualitative study of young student dancers, many reported feeling that puberty could either make or break their careers, depending on whether they would maintain a “pre-pubescent look, conforming more easily to the expectations of the ballet world” (Mitchell et al. 238).

Wider hips, larger breasts, and other qualities of female menarche are quite clearly deterrents toward the ideal ballerina body, despite being inevitable results of being a woman. The culture of ballet; the classical corps of all female dancers; the hierarchy of principal over soloist over corps; the competitive standards of acceptance to intensives, colleges, and companies all combine to make women feel as though they will be successful only if they can maintain a particular physical appearance. This is a feeling that is often only enhanced by teachers, coaches, and directors. Students describe teachers as exhibiting more negative, punitive, and punishing behaviors toward students who are taller or weigh more. Further studies have shown that risk and disordered eating behaviors are “closely associated with perceiving and receiving pressure from coaches regarding the body” (Toro et al. 47). Female dancers are rewarded for appearing childlike and are punished for looking like women.

While high expectations and internalized motivation can serve a dancer well, when these qualities are focused exclusively on the body itself, they can become detrimental to a dancer’s self-esteem and mental health. Amid a culture that objectifies the female body and encourages women to fulfill a very specific and often
unattainable body image, it is inevitable that women would start to internally reduce their own bodies to objects. A case study on ballet students’ perceptions of their reflection in the mirror explains this phenomenon well:

In using the mirror, however, many students will disassociate their somatic selves from the reflection they see in the mirror and become “absent” from their bodies. As a result, they come to view themselves as objects rather than as holistic, kinaesthetic, “feeling” human beings. Many become obsessed with their individual body parts, becoming intimidated or even humiliated by this “dismemberment process.” (Radell et al. 15)

This process of constantly analyzing and fixating on one’s body is made increasingly problematic by dancers’ drive for perfection. External pressure from teachers, coaches, and directors, combined with internal self-criticism, causes dancers to consistently display signs of clinical perfectionism. Although a certain level of perfection-driven thinking can help dancers work hard and perform their best, perfectionism is also strongly correlated with eating-disorder pathology and psychopathological symptoms (Serrano and Amaral Espirito-Santo). In fact, “clinical perfectionism is one of four core mechanisms that maintain ED pathology” (Penniment and Egan 15). Nearly one-fifth of ballet dance students suffer from an eating disorder, about 15% of which are categorized as EDNOS, or “eating disorders not otherwise specified.” While this disordered behavior does not meet the criteria for anorexia nervosa or bulimia nervosa, it is maladaptive, atypical, and very serious. Compared to nondancers, dancers have twice the chance of developing this type of disordered behavior (Arcelus et al.).

Various research has correlated the high rates of disordered eating with the perfectionist tendencies so common in dancers. Weight dissatisfaction is associated not only with attitudes toward food and eating but also with depressive symptoms, as well as anxious or worried feelings regarding weight and body image (Toro et al.). Cognitive fusion, experiential avoidance, and psychological inflexibility are displayed in dancers who have excessive involvement in the content of internal events, including thoughts, emotions, and self-criticism.

These traits are correlated with depression, anxiety, and eating disorders and can also cause dancers to avoid situations that agitate such internal thoughts. Coupled with potentially distressing external criticism, comparisons, and corrections, the mental health of dancers is both delicate and widely disregarded. Many dancers—including Abi Stafford of New York City Ballet and Kathryn Morgan, former New York City Ballet and Miami City Ballet dancer—have publicly begun conversations about their own experiences with eating disorders, anxiety, depression, and other mental health problems. Many have begun pushing for companies and schools to better address and treat the mental health of their dancers, but it is still rare that such efforts are actually implemented.
Beyond issues of mental health, internal and external pressures toward perfectionism can have detrimental effects on physical health as well. Dancers weigh an average of 10%–12% under their ideal body weight; delayed menarche occurs in 70% of female dancers; and amenorrhea occurs in 78% of adult dancers. “The energy deficiency caused by low caloric intake causes complications related to menstrual function, decreased bone density, metabolic rate, immunity, and cardiovascular health; ...and an elevated risk for injuries” (Gorrell et al. 57). The way that ballet culture treats female bodies not only damages their self-image and psyche but also physically makes it more difficult for them to dance to their full potential. The problems inherent in this system are not necessary to sustaining the dance world, and extensive research has shown that interventions promoting body acceptance can produce “significant reductions in global eating pathology, body dissatisfaction, and dietary restraint” (Gorrell et al. 64). These interventions cannot be purely dancer-led, however; there must be institutional change from companies and schools. Research into eating pathology interventions has found that dancers feel it important that there be a “companion module of this intervention delivered to artistic and other administrative staff in hopes that resulting systemic change would be impactful and sustainable” (Gorrell et al. 68). To address the core issues of these trends, companies and schools must take it upon themselves to support their dancers in meaningful, functional ways.

These cultural realities maintain a system of power in which the female dancer is virtually powerless. A fear of being contentious or disagreeable discourages her from sticking up for herself, even if it would better serve her mental and physical health. Perfectionism, disordered eating, and poor mental health are all evidence of the female dancer’s ingrained sense of being an object. Such a belief system, no matter how unconscious it is, disempowers the female student and dancer, making her vulnerable to a power hierarchy that is too often abused by men at the top. Finally addressing the core problems at the root of larger systemic issues is slowly helping to diminish these disempowering realities; nonetheless, the way female dancers are raised to objectify their bodies to the detriment of their own health is problematic, regardless of whether it leads to abuse or harassment.

#MeToo Movement

Any field in which most participants are women and most leaders are men presents a very real potential for abusive power dynamics. Research has shown that “male-dominated organizations are more prone to sexual harassment” (Wingenroth), and the ballet world is no exception. The risk is only increased by the objectification of female dancers, which too often is morphed into sexualized dehumanization. The same habits and patterns that empower men to be leaders while undermining the individuality of women also foster an environment in which abuse can occur. Throughout their training and careers, students and professionals look to teachers,
choreographers, and directors for approval and validation. This dynamic can also quickly become problematic if it is inappropriately exploited. Additionally, the competition of the ballet environment, the scarcity of dance jobs, and the hierarchy in which one person decides a dancer’s fate combine to create “a culture where harassment is tolerated for fear of losing a job or being black-balled” (Wingenroth).

In conjunction with the #MeToo movement, a string of allegations exposed many powerful individuals in the ballet world for their predatory behavior toward female dancers. One of the best-known of these cases was Peter Martins, the sole artistic leader of New York City Ballet from 1990 to 2018. He retired amid accusations, which he denied, of sexual harassment and verbal and physical abuse. Despite several reports of harassment and abuse, there have been no other punishments or consequences for Martins. Another widely publicized instance was a lawsuit filed by Alexandra Waterbury, a model and former student at the School of American Ballet. Chase Finlay, Zacharay Catazaro, and Amar Ramasar all either resigned or were fired from New York City Ballet after being “accused of exchanging, via text messages, naked photos of—and degrading words about—their female colleagues, including Ms. Waterbury and company dancers” (Kourlas and Burke). Similar complaints have been made by dancers at major companies around the world.

In 2017, Marcelo Gomes resigned from his position as principal dancer at American Ballet Theater after a sexual misconduct allegation was brought against him (Fortin). In 2018, an internal questionnaire at Paris Opera Ballet revealed that 26% of their dancers reported either being a victim of sexual harassment or witnessing harassment while at work (Sulcas, “Paris Opera”). That same year, Kenneth Greve was removed from his position as director of the Finnish National Ballet after reports of inappropriate conduct, including commenting on dancers’ appearances and personal lives.

More recently, Yat-Sen Chang, former English National Ballet principal dancer, was granted conditional bail after being charged with 14 counts of sexual assault (PA Media). Around the same time, the Royal Ballet announced that they had removed Liam Scarlett from his position as artist-in-residence after he was accused of sending inappropriate messages to several students (Marshall). Despite the very public media coverage of these high-profile cases, the legal retribution against these men is generally very limited. This only makes it more necessary for companies and schools to address these problems internally, both to protect their dancers and to alter the ballet culture that has normalized remaining silent about abuse.

The ballet world poses several unique barriers to an open discourse on abuse, sexual misconduct, and harassment. This field is difficult to succeed in, and the threat of losing roles, jobs, or opportunities can often make dancers more susceptible to tolerating abusive or predatory behavior. The intimate, physical nature of ballet also requires a level of trust among dancers and between artists and artistic staff that is not
currently being upheld by many men in the art form. Fortunately, the recent rise of these accusations indicates that the culture is finally changing. As more women are empowered to speak out against abuse, the structure of ballet culture and politics must change; however, changes to policy must take into account the unique demands of a dance world that sometimes blurs the lines around a dancer’s rights. In a 2018 Dance Magazine article, Lauren Wingenroth points out that “creating rules around affirmative verbal consent in the studio can feel at odds with dancers’ ability to communicate through their bodies with intention and nuance.” That is why she argues that specific research must be done into sexual harassment in the ballet world. Definitive policies, harassment training, daily check-ins, practice of verbal consent, and a decentralized power system are a few strategies that companies can implement to reduce the chance of harassment. Wingenroth even said that company leaders who convey a sense of urgency about the problem are more successful in preventing it. Developing clear chains of accountability and electing responsible people to positions of power will help reduce any misconception that abuse or suffering is a necessary part of producing great work. These changes will only occur if women feel that they are in an environment that not only permits but also encourages them to speak out.

Increasing Physicality and Advancement of Technique

The changing power dynamics of the ballerina are as clear on stage and in the studio as they are in a boardroom or courtroom. Present-day ballerinas are capable of incredibly advanced technical and physical feats that often contradict their outdated, stereotypical, misogynistic image. In an article on embracing the conflict of the ballerina, author and PhD Jennifer Fisher articulates how effectively the dichotomy of the pointe shoe functions as a metaphor for the dancer herself: “The pristine pink satin on the outside and the unseen blisters, calluses, bunions, and ingrown toenails inside . . . [the] ballerina’s shiny surface unnecessarily masked whatever strength she had, and her technical mastery, achieved through rigorous daily routine, was confused with total submission” (Fisher 5). Although this dichotomy is precisely what makes ballet so challenging, impressive, and beautiful, it also can depict the ballerina as significantly weaker than she is. Of course, the ever-present dichotomy of ballet is that physical prowess and ethereal artistry must coexist. Nonetheless, present-day ballerinas who can turn and jump and dance en pointe with power, strength, and energy challenge the notion that the ballerina herself is fragile or weak.

A 1975 study found that of 61 different activities, ballet was the “most physically and mentally demanding, followed by bullfighting and then football” (Kinetz). Considering that this study was done 45 years ago and that the expectations of the ballet world have become increasingly demanding over time, present-day ballerinas are clearly capable of withstanding enormous physical and mental pressure. The changing demands of the ballet world mean that a dancer must be able to perform various techniques, roles, and styles, oftentimes all in the same night. These demands
generate dancers who are constantly pushing the boundaries physically and artistically. This reality is not lost on audiences: “As a child watching the prima ballerina on stage, her evocative power for me resided only minimally in the role she played. . . . The ballerina was an admired female . . . a public figure who had achieved technical perfection” (Carter 93). It is growing increasingly difficult to confuse the narrative demands of classical ballet—and their reinforcement of traditional gender roles—with the actual empowerment of the woman and her performance.

**Male Gaze and the Ballet Technique**

According to Alexandra Carter, “Male gaze is [a] metaphor for the gender power relations in society and not literally confined only to men.” Although this concept originated as a film theory, many feminist critics have applied its components of a superior masculine gazer and inferior feminine performer to ballet practice. In classical ballet, gender roles are strictly adhered to on stage and in the studio. Classical works such as *Giselle, Swan Lake, Le Corsaire,* and *The Sleeping Beauty* are iconic, revered embodiments of ballet that often depict women quite poorly. The music, choreography, and story lines are ingrained in ballet dancers from a very young age and contribute deeply to our understanding of the technique and certainly of our place as women in ballet and in the outside world. Giselle dies of heartbreak handed to her by an unfaithful man, a storyline that even the most avid romantic would recognize as oversimplifying and belittling toward women. In *Swan Lake,* Sigfried fetishizes Odette in her swan form and then easily confuses her with another woman, quite evidently distilling her to only her physical form. *Le Corsaire* revolves entirely around the women being sold into slavery and sexual servitude, and inevitably, Medora and Gulnare are saved by Conrad, the male hero. Although these stories can be told beautifully and are often performed by strong, powerful women, they represent a time and place in history that drastically undermined women. Feminist journalist Ann Daly articulately defines the need for a distinction between athletic virtuosity and representative worldview: “No matter what the specific steps, no matter what the choreographic style, the interaction structure, pointe work, and movement style of classical ballet portrays women as objects of male desire rather than as agents of their own desire” (Daly 286). These stories were created by a masculine society’s desires and evolved in a culture steeped in difference between the sexes. Although women exist at the center of classical ballets, men control plot and narrative, in addition to physically lifting, turning, and leading the ballerinas.

The idea of male gaze also extends beyond gender’s most literal interpretation to explain the general view of femininity as inferior. Oftentimes in classical ballets, the view of the feminine extends beyond physical sex differences. For example, the stepsisters in *Cinderella* are typically men dressed as women, a point of humor and ridicule, as if being feminine is degrading the men in some way. Given that these
classical librettos were created by men and for male audiences, they clearly adhere to the exact specifications of male-gaze theory.

Additionally, many of the positions essential to the ballet technique were originally created to display—and sell—the female body to wealthy men at the Paris Opera. The very nature of pas de deux and the precariousness of pointe shoes create a system in which the woman appears to rely on the man. In an essay on the Balanchine woman, Daly explains how the ballet technique impedes true female representation: “As long as classical ballet prescribes Woman as a lightweight creature on pointe and men as her supporters/lifters, women will never represent themselves on the ballet stage” (Daly 287). She continues to explain that the woman’s function is to fascinate men and that the ballerina remains silent about her own ambitions or hopes. This is true of most popular classical and Balanchine ballets; to too great an extent, the misogyny of antiquated cultural and social practices has shaded the physical tradition of our art form.

The larger 21st-century world is continually redefining gender, but the ballet world is often too steeped in tradition to quickly adapt to the trends of the world surrounding it. Since the women’s liberation movement of the 1960s and ’70s, women have begun to reclaim their sexuality and to emancipate themselves from the binary gender model. Unfortunately, the ballet technique does still rely on strictly defined gender and heteronormative conventions, which directly contradict this sort of bodily autonomy. That said, the nature of art is that it adapts to and reflects both culture and society—and ballet certainly has the potential to redefine its understanding of gender. Daly poses several hypotheticals about redefining art as genderless and posits that the ballerina must find a way to define beauty without the contingencies of objectification. She makes the point that gender exists as a cultural ideology and is capable of adapting to society. Beauty itself can and does exist outside the boundaries of a culture steeped in male desire.

Female Choreographers

Fortunately, this problem has become apparent to many people who, in different respects, have begun to redefine ballet’s narrative and technical realities. Many choreographers are in fact pushing to create pieces, ballets, and stories that better portray real womanhood, which was the legacy I hoped to follow in the creation of my piece. Women such as Aszure Barton, Anne Teresa De Keersmaeker, Jessica Lang, Crystal Pite, Pam Tanowitz, Annabelle Lopez Ochoa, Amy Seiwert Cathy Marston, and Helen Pickett are just a few of the most prominent female choreographers currently creating major dance works. Their very existence as renowned creators in this field stands testament to the massive progress that has been made to greater egalitarianism. Additionally, these women stand at the forefront of reimagining what ballet can look like and talk about.
Helen Pickett is an American choreographer who studied with Michael Smuin and Lew Christensen. She creates narrative-based, powerful but distinctly feminine pieces such as *Petal* and *Tsukiyo*. Many of her works, such as *The Crucible*, directly reshape female characters to empower them in ways that the original stories failed to do. In this piece, which was performed by the Scottish Ballet, she shaped the “women’s characters with more defiance, and choreograph[ed] bigger roles for them” (Marriott). Pickett has also created various works for Pennsylvania Ballet, Tulsa Ballet, Boston Ballet, Ballet West, and many other leading companies. She has spoken to having experienced internalized feelings of inadequacy at the beginning of her career and giving more “credence to male voices than female voices” (Brandt). Having learned from her experiences, she is now very outspoken about the need for equality in ballet, holding workshops and speaking at panels on the issue. She also specifically chose to keep her work in pointe shoes so as to actively alter the ballet world and create a positive influence for young female students. This intention of actively altering ballet, rather than rejecting the technique altogether, is something that also guided my choreographic exploration of this issue.

Annabelle Lopez Ochoa is another choreographer strongly pulled to narrative-driven ballets, with a distinct focus on portraying women’s stories. She recently created a piece about the life of Frida Kahlo designed to portray the painter’s agency, artistry, and complexity. Lopez Ochoa speaks to the process by which women can better portray the expansiveness and complexity of the female experience: “As women we can expose more layers—sometimes we know we are breaking inside, but we have to keep strong on the outside—and we can be nuanced instead of using cliches” (Peters). Some other pieces of hers that were created to tell women’s stories include a rewriting of *A Streetcar Named Desire* in 2012 and *Locked Up Laura* in 2009. She has created pieces for more than 50 companies, each incorporating her “Colombian roots . . . Belgian roots . . . knowledge in the Vaganova classical technique, hip-hop, jazz and flamenco” (Longley). The detail and complexity of her work, and her commitment to rewriting familiar narratives to emphasize the female story, have made her deeply influential in establishing a more accurate representation of femininity in dance.

Crystal Pite is presently one of the most renowned choreographers in the world. She trained under William Forsythe and currently directs the company Kidd Pivot, which she formed in 2002 in Vancouver. Her work is recognized for its distinctive precision, rigor, risk, poeticism, and complexity. She fuses classical technique with improvisation, original music, text, and rich visual design. She has created more than 50 works for the biggest companies in the world, including the Paris Opera, the Royal Ballet, and the National Ballet of Canada. She feels strongly that audiences need to be able to see themselves in a piece if they are going to become truly invested in it. Much of her work deals with conflict, violence, and darkness, but she is “unfailingly appreciative” of her dancers during rehearsals. She believes that several factors influence the disparity of male and female choreographers. Although she
doesn’t feel she has been disadvantaged because of her gender, she has experienced the broader trend of training differences in ballet: “Girls are less likely to be prized for being a maverick, they’re more likely to be encouraged to look and dance like everyone else—which means that a lot of the creative women will end up in contemporary dance” (Mackrell).

While these women tend to create pieces deeply incorporating a variety of styles, they are all very much rooted in the classical ballet technique—as is much of the 21st-century western concert dance world. As women in ballet become increasingly aware of their own empowerment, change begins to permeate both ballet culture and the entire dance world. These empowered women creating today’s repertoire influence women and girls at every level of training and professional dance. These changes can be seen not only on stage and in the studio but also in the politics and culture of ballet schools and companies across the country. These changes have begun to set off a chain of events that will continue to alter the very existence of ballet. The stereotypes of ballerinas are deeply intertwined with a training system that must also “account variously for its detrimental effects on the physical and mental health of dancers, its elitist implications, its aesthetic triviality and highly authoritarian teaching methods” (Kolb and Kalogeropoulou 107). The beauty and joy of performing and training as a ballerina are things that should be celebrated. With critical examination of the various shortcomings of this system, ballet can be redefined as a place where all female dancers are able to thrive creatively, professionally, and personally.

Choreographic Process

Original Objectives

All of these different issues combine to create a ballet world that disempowers female dancers on multiple levels. Having spent sixteen years as a participant in the ballet world, however, I have had the honor to meet, learn from, and dance alongside dozens of powerful, intelligent, and thoughtful women. Having witnessed these women overcome so much to pursue an art form that they love has affirmed for me that ballet is more than capable of empowering all genders. Despite the obstacles placed in front of us by the existing structures of this world, women consistently use ballet to become stronger emotionally, physically, and mentally. As the practical component of this thesis, I wanted to create a piece to visually represent the process by which women are reclaiming the ballet world. Many different aspects of the ballet technique, as a remnant of the patriarchy, are rooted in objectification and sexualization. With this piece, however, I wanted to assert that the beauty of ballet can be empowering rather than objectifying and that women can tell their unique stories through the technique.
Analysis of Process

My piece, *Pas de Femme*, was a part of the Choreography 3, Senior Production, course, which is open to all senior dance majors. The goal of this course is for each student to choreograph a full-length piece on first-year dancers. The piece must have a specific meaning and intention, which must be adhered to clearly throughout the yearlong process. Long before registering for the course, I’d had the idea to create a piece to illustrate female empowerment through ballet. I decided that getting to work with first-year dancers on the piece would be especially meaningful. Reflecting on myself and my peers during our first year as members of Butler Ballet, I recalled a great desire to please the faculty at Butler and, ultimately, an artistic director at a company. Oftentimes, this was at the expense of our own mental, emotional, and physical health. As I progressed throughout my four years in the program, I found healthy ways of working hard and committing myself to the art form; however, for myself and many around me, it has been an uphill battle to improve our self-image, focus on mental health, enforce healthy eating habits, and eliminate the many harmful tendencies ingrained in us by the ballet world. Additionally, while at Butler, I have become increasingly opinionated, outspoken, and indignant about a variety of social, political, and personal issues. These qualities are not always encouraged in a ballet dancer, but I believe that they are an important aspect of a truly well-rounded artist. Dance has increasingly become an artistic outlet for me to express the totality of my experiences and ideas; however, I recall as a first-year student feeling a definite wariness about being perceived as controversial or too opinionated. Knowing the sorts of pressures placed on dancers coming to their first year of college, I assumed they would be familiar with a sense of the ballet world stifling their minds or overall well-being. The goal of my piece developed into giving my dancers a chance to find power through the technique and to reclaim ballet for themselves.

On May 5, my piece, along with four others, was performed in Clowes Memorial Hall, but this process began in late August, when we auditioned the 50 first-year dancers over Zoom. Going into the audition process for my piece, I knew that I wanted to work with dancers who seemed most ingrained in the ballet technique, but I greatly wanted to avoid choosing dancers because of how their bodies may or may not adhere to the typical expectations of a ballerina. After all, doing so would directly contradict my piece’s intention from the very beginning. Rather, I focused on choosing dancers who seemed most comfortable in the technique of classical ballet. Working with dancers who were secure in that technique would most effectively convey a piece about empowerment through ballet.

After choosing my cast of 10, my first priority was to clarify the meaning of the piece to them. I wanted them to fully comprehend the brevity of the piece, as well as the individual ways that they could each connect to it. As the rehearsal process progressed and the piece began to develop, I further explained my specific intentions
to the dancers. It was important to me that they understood the meaning of each movement so they could instill their own experiences and perspectives into the story.

Much of the movement in my piece was intended to be a literal interpretation of an idea or concept. I began the piece with the dancers facing backward in a V formation, the peak of which was upstage. The piece opened with one of the girls tapping out four notes with her hand on her leg, hip, stomach, and shoulder. This movement was repeated several times throughout the piece by various dancers. It was inspired by the way dancers will sometimes count a piece of music by tapping their legs or clapping. The tapping begins in a strict 4 but is later altered and quickened. As dancers, we spend our entire careers dancing to counts given to us by choreographers, and with this movement, I literally wanted the dancers to start dancing to their own personal rhythms.

Early in the piece, there’s a moment when the dancers turn around and notice that they are being watched by an audience, which initiates a series of robotic, angular movements in which the dancers physically manipulate their own bodies. Ballet dancers stare at themselves in the mirror, constantly critiquing themselves and their bodies. Body dysmorphia, outside criticism, and even minor changes in our bodies can have an extreme impact on our perceptions of ourselves. Oftentimes, we can’t help but wish we could literally sculpt our bodies with our hands to fix problems we’ve been conditioned to believe exist. Dancing when you know an audience, a teacher, or an artistic director is watching you is an added pressure that can restrict the freedom of a dancer’s movement. The next phrase illustrates a sense of frustration with this, as well as an attempt to break free from the feeling of being watched. This section was the only moment in the piece when I had the dancers improvise their own choreography; my only requirement was that it be as quick and expansive as possible.

Another facet of being watched while dancing is that the dancer is constantly trying to improve their technique, implement corrections, and adjust to the preferences of the teacher or choreographer. Although these are important aspects of advancing the ballet technique, they also restrict a dancer’s sense of freedom and expression when they dance. In an effort to represent every dancer as an individual, I asked each of them what sort of correction they most frequently receive, what they’re always working on and thinking about. I choreographed a short phrase for each dancer based on this concept. At the end of this section, I had most of the dancers repeat this phrase once before exiting stage.

Three dancers remained on stage and began a phrase of movement in which they revolved around one another. Each of the three took a turn in the center of the stage, where they performed a series of movements designed to appear puppet-like, rote, and mechanical. Meanwhile, the other two dancers continued to revolve around the stage, performing traditional ballet steps with limp, robotic upper bodies. I wanted this section to represent the hierarchy of the ballet world and how dancers can become
so caught up in the labels they are given. When a dancer is so focused on earning the next job, promotion, or role, they lose sight of creating art for the sake of art and risk becoming derivative in their approach to dancing. Two more dancers entered the stage, tapping their legs in unison, again harkening to the rhythmic metaphor. As they veered from the unison pace, their tapping began to expand beyond their thighs, to other places on their bodies and the stage floor itself, further illustrating a search for artistic freedom.

The next two dancers to enter the stage represented the sense of competition that permeates the dance world and often becomes more harmful than encouraging. From opposite sides of the stage, they appeared to be fighting one another before finally finding solitude and comfort in their shared experiences. The next two dancers who entered stage reflected a similar development. The more upstage dancer carefully and methodically followed the dancer in front of her. She copied each of the other dancer’s movements to represent the constant striving of many dancers toward replicating those ballerinas they believe are better than them. Although you can learn a lot from watching and emulating the dancers around you, it can also be harmful to constantly repeat the narrative that everyone around you is better than you are in some way. After following the other dancer for a while, the upstage-most dancer broke free from the relationship, performing a choking motion that the other dancers on stage mimicked at random intervals. The upstage dancer began running around the stage at full speed, trying to get her partner’s attention. Unfortunately, as the center dancer slowly revolved, she kept barely missing direct eye contact with the other dancer, until finally, they caught up to one another, as if to show that they had realized how much they shared as dancers and how much they could support each other rather than remaining in constant opposition. Together, they performed a short, slower phrase designed to show them relying on each other for comfort and encouragement. COVID partnering restrictions posed a distinct challenge here, as it needed to appear as though they were leaning on each other without them actually touching.

By the end of this section, all but one of the dancers remained on stage, posed in total stillness broken only by the random instances when I had them jump with flailing limbs and land with their hands wrapped around their necks. Throughout the piece, I wanted to have those little moments when each dancer could express her stifled frustration in this very literal way. This tiny movement proved to be one of the most difficult parts of the piece to make look authentic. Ballerinas are so rarely encouraged to express negative emotions such as rage, grief, and irritation, and it was especially difficult to pull those feelings out of them.

As this middle portion of the piece dwindled, I chose to have each dancer remain on stage, holding her hands over her ears or eyes or wrapping her arms around her stomach or shoulders. In this moment, I had the dancers become props or scenery, as they so often are in classical ballets. Their hands over their eyes or ears represented the way the world of classical ballet sometimes devalues their opinions in the creative
and administrative process. Their arms wrapped around their stomachs or shoulders represented the dancers protecting themselves by becoming smaller and more condensed. At this point, I had one dancer enter from the upstage right wing to represent the idea that empowered women empower other women. Her movements were decisive, intentional, and powerful as she walked around the stage, through the dancers, repeating a similar jump with her fists extended in the air. After she repeated this jump multiple times as if to inspire and compel the other dancers, all 10 women repeated the jump in unison. From there, they ran to a new spot on the stage and began a short, unique phrase of movement very clearly incorporating balletic movements. In a seemingly random formation on the stage, each dancer progressively became faster and angrier, creating an increasingly chaotic tableau. As each woman finished the repetitions of her phrase, she ran off stage.

The dancers reentered in two straight lines, one along the front of the stage, and the other along the back. The dancers walked slowly and passively, with their arms in first arabesque and their legs turned out, walking through first position. This image is an ode to the iconic line of corps dancers entering stage as the elusive Shades in La Bayadere. As beautiful as this image of the 32 perfectly synchronized dancers can be, it also forces dancers into a very specific and generalized mold, which can be a demeaning process for the individual. One of the dancers broke free from this line and began running and leaping from the front of the stage to the back, performing in short increments, her unique phrase from earlier. She managed to break free from the cookie-cutter expectations placed on her, while still striving to achieve perfection and greatness within the technique.

As the dancers exited stage, they immediately reentered along the opposite parallel. They followed this pattern relentlessly, as if it might never end. When it finally did, the dancers entered again from the corner, performing a series of specific movements as they moved along the diagonal and across the front of the stage. Although each dancer was executing the same decisive, striving movements, all were performed in canon, again creating a sort of chaotic image. This section was a distinct intensification in pace and emotion. The tedium of the beginning sections and the irritation of the middle phrases were now morphed into energetic determination. Each dancer finished out this section with several repetitions of her earlier “fixing, correction” phrase. The cast made their way into a circle, where they shared a breath together, with their hands over their chests. This was designed to represent the meaningful impact that a community of dancers can have on one another. In canon, each dancer leaped off stage during the choreographic and musical climax of the piece. At this point, I had imagined the dancers to have achieved total freedom of expression through the execution of this saut de chat, saut de basque sequence.

The next section was designed to allow the dancers to dance for their own joy and pleasure, which I find to be one of the most rewarding experiences allowed to any dancer. As I mentioned earlier, the desire of the female is an often-ignored concept in
ballet narrative, which is something that seems deeply contradictory to me. I asked each dancer in my cast what step or aspect of technique she thought she did best. Many of the dancers had similar answers, allowing me to place them in pairs and to give them short phrases inspired by whatever they looked and felt the best doing. This was, inevitably, a difficult question for each dancer to answer, as we are all so inclined to focus on our shortcomings. Some said they believed their arms and port de bras were strongest; others mentioned their jumps, extensions, control, or turns. I gave them all a sort of artistic freedom with this section, encouraging them to add their own style, make eye contact with the other dancers, and enjoy the movement as much as they could. As their phrases concluded, I had them abruptly switch to very pedestrian movement as they traveled to their final pose. I instructed the dancers to move and fidget and adjust in the way they might if the curtain were down. I wanted to briefly break that fourth wall between the dancers and the audience and showcase their raw, human side. The final pose of the piece was an inversion of the original V, but the peak of the formation was at the front of the stage and all the dancers were facing front. Rather than shrinking or retreating, the dancers were now approaching the audience in a very human, honest way. The final movements of the piece are the same few that it begins with. A simple switch from sixth position to first, a raising of the arms to fifth position, and one final lift of the head to make lasting eye contact with the audience.

Music and Costumes

Throughout this process, I was lucky to work with a variety of talented artists and collaborators. Early on, I realized that I wanted an original score for the piece and chose to work with Sam Stucky, a JCA composition student. I explained the general intention of the piece to him and invited him to attend rehearsals so he could better understand the process. We decided the music could represent the transition from the more predictable, refined, and classical to the frustrated, angry, and contentious. He used similar minimalist themes throughout the score but edited it to reflect each mood of the piece. We chose to begin with a more somber, simple mood to reflect the stoic monotony of the beginning. As the dancers became increasingly aware of their autonomy, the music brightened, sped up, and became more complex. To reflect their rage in the middle of the piece, the music became complicated and dissonant, while still continuing to return to some of the earlier themes. It hit a particularly chaotic, grandiose point at the climax of the piece. As the piece came to a close, it steadily became minimal and modest again. I believe that the classical simplicity of this piano music, coupled with the clear development of each section, made this score the ideal accompaniment to my piece. Having originally looked for an existing piece of music to use for *Pas de Femme*, I know that nothing else would have fit the intention or choreography so seamlessly.

Additionally, I was very lucky to have had assistance in creating the costumes for the piece. My good friend and fellow Butler Ballet dancer Kassi Tiedjens has
worked in the costume shop for several years, helping to create various costumes for our performances. I gave her my broad idea for the costumes, knowing that I wanted them to embody a classical femininity. We ended up with a vague sketch of a short, sheer, mesh dress in various shades of pink, which would be worn over a leotard. As we developed the original prototype, the costume started to embody an Isadora Duncan-like Greek classicism. We chose to belt the dress at the waist, letting some of the fabric out over the belt. The costume ended up being deeply reminiscent of the silk or jersey chitons worn by the early-1900s ballerina. We also created three different color varieties: a very light pink, a lilac, and a dark rose. I wanted the colors to deeply embody a very typically girlish ideal, so as to immediately emphasize that the piece is about embracing femininity, not rejecting it. I have included several photos taken during the dress rehearsal of the piece to showcase the costumes and their adherence to the theme of *Pas de Femme.*

Photo by Maura McHugh

Photo by Maura McHugh

Photo by Maura McHugh
Reflection

Two things were very important for me in ultimately determining whether I could consider this piece a successful representation of feminism in classical ballet. Foremost, I wanted to ensure that the dancers were deeply involved, affected by, and empowered by the piece. One of the ways I achieved this was by creating individualized choreography for each dancer that would best suit their personal connection with the various intentions of the overall piece. I also wanted to constantly ensure that the dancers understood the meaning of the piece. At one point in the process, I asked them what sort of things they love most about the ballet world and what things they would change about it. Their answers to what they love included the opportunity to express themselves using something other than words, the unique bond formed with other dancers, and entry into a world that is constantly challenging them, pushing them out of their comfort zones, and demanding their very best. They also mentioned the energy and excitement of performing; the value of using physical movement to convey strong, powerful emotions; and the infinite opportunities for improvement, hard work, commitment, and discipline. In response to what they wish they could change, they mentioned the norms of race and gender, the constant feeling of inadequacy, and the often-unrealistic expectations placed on bodies and minds. Above all else, they mentioned the desire to feel more human when they dance, the wish that teachers and choreographers would view them as people, not just bodies to be molded. All of their responses resonated deeply with me and spoke to the idea at the core of this exploration. Wouldn’t ballet become better, more honest, more beautiful if
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it celebrated the individual minds and bodies of women rather than distilling us to our bodies and then giving us enormous pressure to make them look a certain way?

These discussions with my dancers made it clear that each woman understood the brevity and importance of the piece’s meaning, as well as her own personal connection to it. That said, it was sometimes still very difficult for them to represent these ideas while dancing. For classically trained dancers, it can be difficult to represent passionately negative concepts. I needed them to not only feel these emotions but also project the emotions throughout Clowes Memorial Hall. While a lot of this responsibility fell on the dancers, I also played a big role in creating a connection between the intellectual and physical. I think the one thing I should have done more during the early rehearsal process was really push the dancers outside of their comfort zones. One lesson I will certainly take into future choreographic projects is that being kind to your dancers cannot restrain your ability to push them further, expect more of them, and be tough with them until they give exactly what you want. Fortunately, as we neared production week, it became increasingly feasible for me to give them the harsh, tough love that would push the piece to where it needed to be. Although I felt that all of the dancers were technically very dedicated, there were consistently some dancers who appeared more committed to the actual emotions of the piece. Nevertheless, by the time we got to the performance, the whole cast was able to connect to the piece in a personal and presentational way that ultimately made this a very meaningful and successful process for me.

The second important marker of success for me was that the meaning of the piece was very clear in its performance. Because I had watched the piece so many times and was intimately familiar with the choreography, it was difficult for me to tell if the message was coming across. Although I couldn’t guarantee that every person watching would completely understand my message, I was confident that nothing extraneous or meaningless had been put in the piece. Every step was intentional and crammed full of symbolism, imagery, and meaning. Although I was fortunate to receive positive feedback after the performance, something I realized throughout this process was that every audience member is going to bring something distinctive to their perspective of my work. To that end, one can only do one’s best to effectively present one’s message and trust that the work is strong enough to affect dancer and audience alike.

Conclusion

This thesis and the accompanying choreographic piece were created to assert that the feminine focus of ballet can be deeply empowering for the modern woman, so long as the community rejects the harmful stereotypical tradition with which it often paints and perceives women. In multiple contexts, women are leading the movement toward rewriting the existing statistical inequalities, reforming traditional
pedagogical methods, addressing longstanding issues of abuse and harassment, and advancing the technique to better portray a true image of femininity. By looking at the historical and present-day political, cultural, and choreographic context, I was able to better approach my own study and exploration of using ballet to reframe a modern-day perspective on the ballerina. In an essay on classical ballet, Ann Daly states, “The first step to creating an alternative discourse is to ask questions—new, difficult, and even disturbing questions. Perhaps it is the only way to present any challenge to the ballerina icon, given that we can never posit who she would be outside of the male constructs that have created her” (289). I believe it is this process of students, teachers, directors, and choreographers continually asking—and trying to answer—questions about what we are doing, why we’re doing it, and how we could do it better that will get us closer to an artistic liberation. Although I don’t think that my thesis answered the perhaps unanswerable question of whether classical ballet can exist without the cultural pressures of gender, I do feel that it discerned that this art form can exist to serve the ballerina herself—in all her personal, artistic, and intellectual complexities—rather than to serve the man who constructed her.
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THE VULNERABILITY OF THE ACETABULOFEMORAL JOINT: EXAMINING ACETABULAR LABRAL TEARS IN CLASSICAL BALLET DANCERS

REBECCA TSCHAN, BUTLER UNIVERSITY
MENTOR: SUSAN MCGUIRE

Abstract

The acetabulofemoral joint, more commonly referred to as the hip joint, is an extremely important mechanism of the human body. It plays a crucial role in a person’s ability to sit and stand, walk and run, jump and crouch, and more. Not only this, but the hip joint bears most of the weight of the body, making it necessary for the joint and surrounding anatomical structures to be strong and stable. Fortunately, hip joints are built in a way that allows for an extreme range of motion while simultaneously providing support for the rest of the body. Additionally, the ball-and-socket construction of the hip joint makes it possible to flex and extend, abduct and adduct, and rotate the legs. In other words, the legs are able to move in nearly every direction, including forward and backward as well as outward and inward, and also rotate externally and internally. Composed of bones, cartilage, muscles, ligaments, tendons, and a synovial membrane, the hip joint is required to be a well-oiled machine; however, the structural complexity and physical demand of the hip joint can make it susceptible to inflammation, degeneration, and chronic and acute injuries. Athletes, who naturally demand more from their bodies, place even more pressure on the hip joints. Classical ballet in particular requires the complex acetabulofemoral joint to move in every conceivable direction. As such, classical ballet dancers can become more prone to acetabular labral tears, a chronic, degenerative condition that affects the cartilage between the acetabulum and femoral head. Although such an injury can be treated conservatively or more aggressively—with arthroscopic surgery—dancers value every possible second of dancing, so to what extent can classical ballet dancers with acetabular labral tears safely manage their pain without the need for arthroscopic surgery?

Introduction

The acetabulofemoral joint is a ball-and-socket joint that connects the femur to the pelvis (Figure 1). It is the point where the top of the leg meets the torso. The femoral head (ball) of the leg sits in the acetabulum (socket) of the pelvis and is held in place by ligaments and tendons while also being supported by incredibly strong surrounding muscles. The bones, ligaments, tendons, and musculature all work
together to ensure a smooth and stable flow of movement of the leg. Because of the intricate anatomical nature of the hip joint, this joint can be categorized as one of the most complex and detailed joints in the human body. Not only is it responsible for bearing the majority of the body’s weight, but the hip joint also requires the leg to move freely in space. Seeing as how the hip joint is largely responsible for a human’s ability to sit, stand, walk, run, and jump, a lot is expected of the joint. The expectation becomes greater when rigorous activity demands more of the joint. Classical ballet requires extreme range of motion of the hip joint, creating an incredible amount of pressure and stress. As such, the joint can become susceptible to injury, specifically acetabular labral tears.

Figure 1. Hip Anatomy

Acetabular Labral Tears

Acetabular labral tears affect the specialized cartilage on the outside rim of the hip joint socket, or between the femur and acetabulum. This particular piece of cartilage, called the labrum, helps the femur head move smoothly within the acetabulum. It is a dense, fibrocartilaginous connective tissue that has various functions, including shock absorption, joint lubrication, pressure distribution, and overall joint stability (Groh & Herrera, 2009). Increased pressure or stress on the hip joint can naturally lead to increased wearing and tearing of the labrum. Although the labrum is designed to withstand some of this pressure and stress, tears in the cartilage can occur, especially in high-performance sports. Naturally, athletes who demand a certain physicality from their bodies are more at risk for developing labral tears. In fact, “the incidence of labral tears in high-demand athletes is increasing as awareness
and knowledge of these injuries expands” (Bharam, 2006). Furthermore, improper development or structural abnormalities of the joint can also put individuals at higher risk of developing labral tears. Although an isolated traumatic event can easily create a tear in the labrum, this thesis is more interested in the progressive deterioration of the labrum in relation to one high-level sport—classical ballet. Because this repetition-based art form expects so much from the acetabular joints, it is essential to examine how and why the combination of repetition and extreme range of motion can affect the acetabular labrum.

Acetabular Labral Tears in Classical Ballet

A dancer’s hips are two of the most vulnerable and important joints in the body. In fact, the way they are shaped and formed sets the standard for a dancer’s turnout, flexibility, and placement, all of which are essential to the life and career of a ballerina; however, repetitive twisting and torquing motions of the hip, which are present in classical ballet, can lead to a destabilization of the hip joint, which, after some time, can lead to a chronically injured hip joint (Crawford et al., 2007). More specifically, in classical ballet, added stress is placed on the “anterior labrum at the acetabular interface where labral lesions commonly occur” (Kern-Scott et al., 2011). Although hip labral tears have many causes, dancers who exhibit extreme ranges of motion—who push their bodies past the normal physical limits—are definitely at greater risk. Even though hip pain is fairly common in classical ballet dancers, a clinic found that over a three-year period, 40% of dancers who were assessed and treated for hip pain had labral tears (Kern-Scott et al., 2011). As the expectation for greater range of motion in classical ballet increases, this percentage of hip labral tears will only increase, but by understanding the anatomy and function of the hip joint, dancers can take preventative measures to minimize hip pain and discomfort while dancing.

Personal Connection

For a dancer, aches, pains, and injuries are unavoidable; they come with the territory. Most of the time, they are a small price to pay for the love and passion the artists have for their art form; nevertheless, a chronic injury can plague a dancer’s physical and mental health. Despite this, a dancer often has the tendency to push through the pain in hopes of landing a coveted lead role in a ballet or an elusive company contract.

Since I was diagnosed with a hip labral tear two years ago, I have come to understand the importance of physical therapy and general pain management. At the moment, my hip labral tear is non-displaced and, more importantly, asymptomatic, so surgery is not necessary just yet. Instead, I have been focusing on physical therapy as a means for relieving pain and discomfort. This means attending weekly physical therapy appointments and integrating several hip and core-strengthening exercises.
into my daily routine in hopes of preventing the tear from worsening. I have talked to several dancer colleagues who have gone through the entire labral-tear ordeal, many of whom opted to receive surgery, and the results vary from person to person. While some say that surgery was the best decision they could have made, others advised to hold off on the surgery for as long as possible. The extreme range of responses I have heard inspired my research question: To what extent can dancers with hip labral tears manage their pain and discomfort without the need for a surgery that they will potentially regret?

Thesis Statement

The empirical research that I have gathered and analyzed over the past year regarding acetabular labral tears has opened my eyes to the prevalence of this injury in classical ballet dancers. Interviews with hip specialists, physical therapists, and other dancers with hip labral tears also provided a plethora of insight. My hope is that, with this information, dancers become more aware of the subtleties of the hip joints and are able to take preventative measures to decrease the rate at which the labrum deteriorates. There is no denying that the combination of pressure, rotation, and extension in ballet has a lasting effect on the hip joint, so it is essential that dancers act in proactive manner rather than a reactive one.

Anatomy of the Hip Joint

As mentioned previously, the hip joint is an extremely intricate part of the body and is made up of bones, ligaments, tendons, muscles, and cartilage, all of which work together to allow the leg to move freely. The combination of these anatomical structures also allows humans the ability to sit, stand, walk, run, and jump.

Skeletal

The acetabulofemoral joint is essentially made up of just two bones: the femur and the acetabulum. The acetabulum is the socket of the pelvic bone and is cupped in such a way that the spherical shape of the femoral head can sit inside the cup. Because these form a ball-and-socket joint, the leg is able to move about freely and in nearly every direction with a great range of motion. The joint is also a concentric joint, “meaning the center of the ball and the center of the socket should be in the same position” (P. Meere, personal communication, January 24, 2021). This concentricity allows for a smooth range of movement, but if the concentricity begins to deviate, problems are likely to ensue, one of which is an acetabular labral tear.
Ligamental

With the help of ligaments, the ball-and-socket joint and the aforementioned concentricity become more stable. Four main ligaments surround the hip joint (Figure 2), and these are classified as either intracapsular, meaning within the capsule of the joint, or extracapsular, outside the capsule of the joint. The iliofemoral, ischiofemoral, and pubofemoral ligaments are all extracapsular, and the ligamentum teres is intracapsular.

The iliofemoral ligament, also referred to as the Y ligament, is the strongest of the four ligaments and prevents the hip joint from hyperextending. It arises from the anterior inferior iliac spine and then splits into two branches before attaching into the intertrochanteric line of the femoral head, which gives it its Y appearance. The ischiofemoral ligament, in comparison, is the weakest of the four ligaments, although it still prevents excessive extension by spanning from the ischium to the back of the acetabulum to the base of the greater trochanter in a triangular fashion.

The pubofemoral ligament connects from the pubis to the femur neck and reinforces the stability of the joint capsule by preventing excessive abduction. Lastly, the ligamentum teres, otherwise known as the ligament of the head of the femur, acts as an important hip stabilizer, preventing the femoral head from subluxation during flexion or abduction.

Figure 2. Ligaments of the Hip Joint

![Figure 2. Ligaments of the Hip Joint](source: OpenStax College, 2013.)
Muscular

Because the skeletal structure of the hip joint allows for a freer range of motion compared to that of other joints, the muscles that support and surround the hip joint need to be quite large and strong. The gluteal group, which includes the gluteus maximus, gluteus medius, gluteus minimus, and tensor fasciae latae, supports the hip from the buttocks, or the posterior part of the pelvis. The muscles in charge of adducting the thigh to the hip joint are aptly known as the adductor muscle group and include the adductor brevis, adductor longus, adductor magnus, pectineus, and gracilis. They not only pull the inner thigh up to the hip but also pull the leg inward toward the opposite leg. The iliopsoas muscle consists of the iliacus and the psoas major, which connect the lower back to the upper part of the femur. In short, these muscles all help stabilize the hip joint in conjunction with the aforementioned ligaments. Depending on how tight or relaxed these muscles are, the degree to which the hip can be flexed will vary.

Labral

The labrum is a fibrocartilaginous connective tissue that protects the acetabulum from the femur head, and vice versa. It is loosely attached to the acetabular rim and prevents bone from rubbing against bone and also prevents dislocation of the femoral head. It also adds further stability to the hip joint when exposed to tension. When the force distribution of the femoral head increases, the tension “becomes so great that the labrum, unyielding to this force, actually becomes stiffer than the adjacent articular cartilage, thus, stabilizing the joint” (Grant et al., 2012). As a result of this stabilization, a seal is created that obstructs fluid flow in and out of the joint. This seal allows pressure to be distributed more evenly, reducing the stress placed on the cartilage during weight-bearing. Nevertheless, being a fibrous tissue that is under constant stress, the labrum is subject to a lot of wear and tear.

Motional

When the bones, ligaments, and muscles are developed properly, the hip joint is able to move very comfortably. Because the center of the axis of the hip joint is at the femoral head, the leg is able to flex, extend, adduct, abduct, and rotate along the transverse, longitudinal, and sagittal axes. For example, when walking along the sagittal dimension, the legs move in a forward/backward manner. Similarly, when sitting down in a chair, the hip joint must flex. These concepts can be applied to other automatic movements that are made daily without much thought.
Acetabular Labral Tears

Acetabular labral tears occur when the labrum detaches from the hip or begins to degenerate. These tears can be categorized by location (anterior, posterior, or superior), morphology (radial flap, radial fibrillated, longitudinal peripheral, or unstable), and etiology (Groh & Herrera, 2009). Studies have found that most labral tears are situated in the anterior region of the labrum (Figure 3). Several reasons have been proposed for why anterior labral tears are more common. First, because the anterior, or front, portion of the labrum has a poorer vascular supply, less oxygen and fewer nutrients are delivered to that region, which could result in that specific section being more prone to degeneration. Second, the labrum is thinner and weaker in its anterior region. Furthermore, the fibers of the labrum in the anterior region are parallel to the bony edge, making separation due to traumatic forces easier (Grant et al., 2012). In contrast, the fibers of the labrum in the posterior region are perpendicular to the bony edge, making that part of the labrum more resistant to tears. Finally, it has been shown that more force, pressure, and stress are placed on the anterior portion of the labrum (Groh & Herrera, 2009).

Figure 3. Acetabular Labrum

Note: MRI of normal acetabular labrum (left) and torn acetabular labrum (right).
Source: Heard, 2016.

Causes

I was fortunate to have the opportunity to speak with Dr. Patrick A. Meere, a board-certified orthopedic surgeon who specializes in hip and knee surgery (Appendix A). When asked how hip labral tears come to be, he explained that labral tears could be
classified as either traumatic or progressive. More often than not, hip labral tears tend to be the latter. Dr. Meere went on to say that the wear-and-tear injury of the labrum can often be attributed to structural deformities such as hip dysplasia or femoroacetabular impingement (FAI).

Hip dysplasia is a developmental condition whereby the hip joint forms abnormally, causing incomplete coverage of the femoral head by the acetabulum. With hip dysplasia, an important aspect is the amount of deviation from normative degrees of the center-edge angle (Harris-Hayes & Royer, 2011). The center-edge angle refers to the alignment of the center of the femoral head in relation to the edge of the superior lateral edge of the acetabulum. If the angle begins to change as a result of the hip dysplasia, the labrum can become affected. According to Dr. Meere,

There is a mild to moderate degree of dysplasia that you can see on the superior lateral edge where there is no longer a sharp angle but rather a shallow angle, kind of like an upward-rounded edge as opposed to a downward-rounded edge, and that’s when you know you have some migration or some loss of concentricity, and that’s when the labrum is being called upon to do the work of the acetabular edge to keep the socket in place. So, that causes a lot of sheer force across the labrum, and the labrum, being a fibrocartilage, at some point has a yield point, and once you reach the yield point, that’s when you start having problems and having detachments.

In a nondysplastic hip, however, FAI is the primary cause of labral tears. There are two types of FAI that can present: cam and pincer. Cam FAI refers to the loss of concavity of the head-neck junction of the femur (Harris-Hayes & Royer, 2011). Pincer FAI, in contrast, refers to the excessive edge of the acetabulum resulting in over-coverage of the femoral head. Either way, the structural abnormality will limit the range of motion of the hip joint and “result in repetitive impact of the proximal femoral neck against the acetabular labrum” (Bedi et al., 2008). As a result, the progressive degeneration of the acetabular labrum can potentially be attributed to hip dysplasia or FAI—or, in some cases, even both.

Symptoms

The most common complaint associated with acetabular labral tears is anterior hip pain or pain in the groin area. Other possible symptoms include a clicking or catching sensation when moving the leg or even a weak, giving-way feeling consistent with hip instability. “Many patients with labral tears describe a constant dull pain with intermittent episodes of sharp pain that worsens with activity” (Groh & Herrera, 2009). When the labrum is torn, the hydraulics of the joint are negatively affected and there is an acceleration in the eccentric wear of the cartilage, creating a feeling of unsteadiness in the joint (P. Meere, personal communication, January 24, 2021).
I also spoke with a professional ballet dancer who was diagnosed with an acetabular labral tear in her pre-professional days of training (Appendix B). She described “this clunking in my hip that would happen every time I would lift my leg above 90 [degrees]” (anonymous dancer 1, personal communication). When asked to describe her pain level on a scale of 1–10 prior to surgery, she said that it was usually a dull ache that lingered around a 2 or 3 throughout the day. It typically felt irritated, like it needed to pop, and all the muscles surrounding the joint were constantly tight because they were desperately trying to protect the torn labrum. She said that at its worse, the pain could reach an 8 or 9. Another dancer I spoke to described similar symptoms: “I would get snapping, clunking, and grinding. And then a lot of pulsing because it would get really angry and inflamed” (anonymous dancer 2, personal communication).

According to Dr. Meere, it is quite common for dancers to exhibit symptoms of hip problems in their early 20s, which is consistent with the dancers I spoke to; however, Wendy Whelan, one of the prima ballerinas of the 21st century, did not experience her labral tear until very late in her career: “My whole career, 43 years of dancing, I’ve had such minimal pain. That’s a really lucky thing, but two of the last three shows, to cross from one side of the stage to the other, the pain I felt, just walking, was . . . it’s just shocking” (Saffire & Schlesinger, 2016). This demonstrates just how different and individual each body is, but the fact of the matter is simple: Classical ballet puts an added pressure on the hip joint that can lead to progressive degeneration of the protective layer of cartilage between the femoral head and acetabulum.

Diagnosis

Odds are, if you ask the average person what an acetabular labral tear is, they will have difficulty describing where the injury is located, not to mention what the injury entails. Acetabular labral tears were previously thought to be uncommon injuries, but they are “becoming diagnosed with increasing frequency,” with 22%–55% of patients who present with hip or groin pain being diagnosed with a labral tear (Groh & Herrera, 2009). Furthermore, it can take two years for patients to finally receive a diagnosis.

If a patient reports hip pain with symptoms consistent with a hip labral tear, physical tests are the first to be performed. Dr. Meere mentions that it is important to consider the patient’s gait pattern, overall elasticity, leg length, and overall range of motion before diagnosing a tear. Following these tests, an anterior hip impingement test is performed (Figure 4). A positive anterior hip impingement test is one of the most common and consistent ways to suggest a labral tear. According to Dr. Meere,

Part of the range of motion is a challenge test, specifically the femoral acetabular impingement test. This is when you bend the leg at 95–100 degrees and then you cross over to the midline and then twist in. So, what you’re trying
to do there is put pressure specifically on the anterior portion of the hip and you can find out whether or not there’s a partially torn labrum; you will elicit tenderness there, and that’s how you have a clinical diagnosis of a femoral acetabular impingement and, secondarily, a labral tear.

The combination of the anterior hip impingement test with other tests will typically provide a good indication of whether an acetabular labral tear is present. Carrie Gaerte, a certified physical therapist and athletic trainer with St. Vincent Sports Performance, says that part of the reason for the increased incidence of hip labral tear identification is that physical therapy tests have gotten so good at identifying them (personal communication, March 22, 2021; Appendix C). She described the tests she typically conducts on patients who present with symptoms consistent with hip labral tears:

There’s a test called a SADIR test, and it stands for hip flexion, adduction, and internal rotation. That position of the hip kind of impinges the joint, and so if there is any inflammation, that will tend to be painful. That can indicate two things: either a potential labral tear or just hip-joint impingement, which is irritation of the hip and inflammation of several structures. Then there’s the Hip Scour Test. You’re taking the hip and literally just grinding it in the socket, creating some compression, and you flex the hip all the way towards the abdomen and you stir it around in the joint. A lot of times, if people have
impingement, this can also be painful. When it’s really eyebrow-raising is when you feel a palpable clunk or click or pop while you’re scouring the joint, and obviously, if that’s painful, that’s a pretty telltale sign that there is a labral tear. And then the other hip joint test that can give you an indication of a labral tear is called a FABER test, and that stands for hip flexion, abduction, and external rotation.

If some combination of these tests is positive, an MRI is the next thing to be performed, which will indicate the presence of a tear through detailed pictures of the labrum and the surrounding cartilage and soft tissue. The MRI, however, should be a specialized MRI that is combined with an arthrogram. The arthrogram is necessary for the diagnosis of a labral tear because it requires the injection of a fluid contrast that will go into the leaflets of the tear and separate those leaflets. A regular MRI, in comparison, will not explicitly show a tear. The imaging should also be done from multiple views: “There’s a special MRI that’s specific to labral tears where you look at different quadrants so you have a better understanding of the morphology of the dysplasia and find out how much retroversion or anteversion there is” (P. Meere, personal communication, January 24, 2021).

Acetabular Labral Tears in Classical Ballet Dancers

The intense athleticism required of classical ballet dancers goes largely unnoticed most of the time. For an audience, visually, the ethereal quality overpowers the athleticism, which is the goal of every dancer: executing strength and control while projecting softness and gracefulness. The time, effort, and discipline that ballet dancers put into their craft are unparalleled; however, with this dedication and constant work comes the danger of injury. Sprains, stress fractures, and broken bones are all too common in the dance world, but it is the chronic and progressive injuries that can be the most detrimental. An acetabular labral tear is one of many degenerative injuries that can plague a professional dancer’s career. The motions that are executed in the classical ballet technique put a lot of stress on the body, particularly on the acetabular joint. For example, in a développé à la seconde, a fundamental step in classical ballet, one leg is raised to the knee of the supporting leg and then unfolded to an extended position directly to the side. Ideally, the extension should create an angle that is greater than 90 degrees. In addition, the extension is accomplished with maximum external rotation, which is another motion that puts added pressure on the hip joint.

Plenty of studies have focused on the repetitive motion of certain sports. It has been found that the repetitive external rotation, or hyperabduction, that is required in ballet is more likely to result in labral tears (Charbonnier et al., 2011). It is also interesting to note that, because of the anatomical nature of the female body, there is an increased incidence of hip dysplasia in women, which can make women more prone
to hyperarthritis and labral tears. Given that the dance field is predominantly made up of women, labral tears in classical ballet dancers become that much more common.

Classical ballet requires a constant external rotation known as turnout. This external rotation of the legs should be solely achieved through the hip joints, avoiding any compensation in the joints above or below the hip, most notably the knee and ankle joints (Gupta et al., 2004). This external rotation is in constant practice. Whether it is during something as simple as standing in one of the five basic positions or something more complex such as a pirouette, external rotation is necessary for the overall aesthetic look and fundamental success of the movement. Turnout, however, puts additional stress and pressure on the joint, and the “increased capsular tension can lead to injury of the static hip stabilizers, resulting in painful acetabular labral tears” (Rehmani et al., 2015). Thus, it is essential for the classical ballet dancer to understand the proper function and motion of the joint in order to minimize the stress that is placed on it, because the extreme external rotation can cause the head of the femur to sit too far forward in the acetabulum, eventually causing it to give way (Rehmani et al., 2015).

One study conducted by Cianci and colleagues (2019) followed 76 adolescent patients, all of whom were diagnosed with labral tears. The researchers wished to examine the effects of nonoperative pain management of hip labral tears in these patients. Of the 76 patients, 18.4% were dancers and 7.9% were gymnasts. The researchers found it interesting that almost one-quarter of the total participants were performing arts athletes whose sport required extreme flexibility and “moving the hips into extreme ranges of motion, especially in hip flexion and abduction directions.” Another study examined hip strength deficits in patients with symptomatic FAI and labral tears. It determined that hip strength deficits were found in 92% of patients, with the most common deficits being seen with hip flexion and abduction—in other words, decreased range of motion and overall function (Nepple et al., 2015). It is intriguing how big a role hip flexion and abduction play in classical ballet, and yet when it comes to the strength of the two respective movements, people with labral tears often experience a lack of strength in their execution.

Furthermore, in classical ballet, a strong sense of muscle memory is required. For muscle memory to take action, daily repetition of movement is essential. With this repetition, however, come pros and cons, a con of which is that the constant repetition leads to microtraumas (Rehmani et al., 2015). It is no wonder, then, that overuse is the most common cause of injury in dancers. A prime example of the effects of repetition and overuse in classical ballet is provided in a study done by Charbonnier et al. (2011) assessing the congruence and impingement of the hip joint in professional ballet dancers through a motion-capture study. Researchers found that movements such as développé à la seconde, grand écarté facial, grand écarté latéral, and grand plié all subjected the hip joint to impingement and subluxation of up to 5 mm (Meuffels et al., 2018). These movements are done daily in ballet classes, and they all require an
extreme range of motion in the hip joint. It is important to note that for these movements, hip flexion and abduction are the main ranges of movement.

As mentioned in a previous section, the presence of dysplasia or FAI in a hip joint can cause and accelerate the degeneration of the labrum; however, in classical ballet, the sole execution of repetitive and extreme movements can be equally responsible for the wear and tear of the cartilage. In fact, in one study, 30 dancers with labral tears were examined; none of the dancers had any form of structural abnormality in their hip joints, yet they still exhibited labral tears. It can be assumed, then, that overuse was the probable cause of the labral tears in these dancers and that “extreme compression forces placed on the labrum during dance activities accelerate deterioration” (Kern-Scott et al., 2011).

**Treatment Options**

When an acetabular labral tear is first diagnosed, a conservative treatment approach should always be recommended. When it comes to a labral tear, surgery should be the last option, and sometimes, when the tear is asymptomatic, surgery is not even necessary. The first course of action should therefore be rest, anti-inflammatory medicine, and physical therapy.

**Rest and NSAIDs**

Rest and nonsteroidal anti-inflammatory drugs (NSAIDs) are usually prescribed to patients who receive a diagnosis of hip labral tear. Unfortunately, rest is not a readily accepted option for classical ballet dancers. A lot of the time, dancers will continue dancing through minor injuries, which can then escalate to major injuries. Even surgeons such as Dr. Meere recognize how competitive dancers are and how long they are willing to dance through pain: “Ballet dancers are a particular challenge, especially when it comes to feet and the lower extremities, and because it’s such a competitive field, they’re willing to sustain injuries and work through injuries a lot longer than others, so they’re self-destructive in a sense” (P. Meere, personal communication, January 24, 2021). As a dancer, I need to constantly remind myself that it is better to take a day or two off to rest in order to preserve my body long-term. Particularly with an injury such as an acetabular labral tear, in which the surrounding tissue becomes inflamed, it can be beneficial to rest to bring the inflammation down.

**Physical Therapy**

Physical therapy is typically the next step in attempting to relieve the pain that comes with acetabular labral tears. Dr. Meere emphasized that patients should commit to six months of intense physical therapy before deciding to go the surgical route (personal communication, January 24, 2021).
Physical therapists employ various treatment methods to try to relieve the pain and discomfort associated with labral tears. Ms. Gaerte tends to use the Graston technique, which is an instrument-assisted soft-tissue mobilization method that releases tension by helping to break down scar tissue. She either scrapes the affected area with Graston tools or uses a cupping technique to make sure there are no fascial restrictions that might mimic a labral tear. She also mentions that, a lot of the time, the psoas muscle becomes irritable because it wants to help out and support the hip joint, creating trigger points in the muscle, so she will work on releasing those trigger points with these techniques—Graston and cupping—so as to effectively stretch the hip flexor without overstretches it (personal communication, March 22, 2021). Physical therapists also do a lot of pelvic corrections and mobilizations because the hip is encased in the pelvis and hip joint pathology will cause the surrounding muscles to become irritated, which might lead to them pulling on the pelvis in ways that can put the hip in a precarious situation.

Another nonsurgical treatment option that can be performed by physical therapists to relieve pressure is dry-needling. Similar to acupuncture, dry-needling uses a thin monofilament needle to penetrate the skin and release trigger points in the underlying musculature. It is used primarily for the management of neuromusculoskeletal pain that causes movement impairments.

Lastly, an important step in the physical therapy process is the strengthening of the surrounding hip-joint muscles, most notably the gluteal muscles. Examples of exercises that engage and strengthen these muscles include glute bridges, single-leg bridges, side-lying clamshells, and side planks with abduction. Ms. Gaerte explains that although the glutes are the largest muscle in the human body, they are often also the laziest muscles (personal communication, March 22, 2021). Even when someone has hip pain, the gluteal muscles tend to go to sleep because the hip flexor ends up taking over in the front, creating an imbalance. As a result, it is essential for patients to activate and strengthen the gluteal muscles to help support and stabilize the hip joint.

One of the dancers I interviewed said that physical therapy allowed her to strengthen her hips and gluteal muscles, giving her the chance to truly focus on correct alignment in dance classes, but there came a point when she decided that physical therapy had done all it could do; yes, physical therapy was helping, but the underlying problem was not going away. Labral cartilage cannot regenerate and heal itself like broken bones can, so there was no chance for the labral tear to repair itself. She said that, given how long the problem—the labral tear—had persisted and the amount of damage the labrum had sustained, surgery was the best course of action: “There’s only so much you can do about the fact that there’s bone on bone. Even in proper rotation, proper placement, if your labrum isn’t there, it’s not going to buffer” (anonymous dancer 1, personal communication). Similarly, another dancer explained that physical therapy and cortisone injections were a short-term solution.
There comes a point when one simply cannot push through the pain any longer and nonoperative treatment methods no longer aid in pain relief. As such, nonoperative pain management such as physical therapy can be beneficial for the short term, but as a long-term solution, surgery might be necessary, particularly when there is structural abnormality present, such as FAI or hip dysplasia.

**Arthroscopic Surgery**

As mentioned, surgery should only be considered as a last resort. Of course, if patients are in a lot of pain, their mobility has significantly decreased, and physical therapy is not relieving the pain, then surgery is the next course of action. Even though a hip surgery is a hip surgery, Dr. Meere explains that the field of science has progressed rapidly, to a point where surgeons are extremely familiar with the procedure (personal communication, January 24, 2021). He proposed a thought that many people struggle with: “At what point do you decide and say, ‘Look, right now, hip surgeries are so good, why are you making yourself miserable?’”

An arthroscopic acetabular labral tear repair surgery is a fairly quick, minimally invasive outpatient procedure that hopes to restore the labral suction seal and hip stability (Woyski & Mather, 2019). The recovery period following the surgery is typically six months. Ms. Gaerte explains that it could actually take closer to a year before a dancer begins to feel normal again (personal communication, March 22, 2021); however, it is comforting to know that with the advancement of technology and increased knowledge regarding hip labral tears, an increasing percentage of patients are able to return to higher levels of activity and rigorous exercise following labral repair surgery (Woyski & Mather, 2019). It does depend on the severity of the tear and the type of surgery the patient has. Often, the labrum will be debrided, repaired, reconstructed, or augmented; however, it has been found that “excision of the labrum frequently results in a symptomatic hip with a greater frequency of resultant arthritis than when the labrum is preserved or repaired” (Grant et al., 2012).

Surgery, is still surgery, however. It is not something that should be done lightly, and there is always the risk for complication. Not only this, but the rehabilitation process following a hip surgery is extremely tedious. A lot of discipline and effort go into making sure that the hip joint heals correctly following the traumatic events of the repair surgery. After all, a minimum six-month recovery period is dedicated to regaining strength, muscle mass, mobility, and range of motion. One of the dancers who had the surgery took me through a step-by-step process of what her recovery time looked—and felt—like:

Two days after I got out of the hospital, I had my first PT [physical therapy] session. The physical therapist looked at the hip and made sure everything was alright. She did the gentlest mobilization I’ve ever had done on my body, with the brace off. We practiced using crutches, and then I was on the standing bike.
Zero resistance, and just very slow. I just remember feeling like, “This is not my leg. It’s so weak, I can’t engage it.” So that was really freaky. Eventually, the brace [came] off. I was in physical therapy two or three times a week. I did mobility stuff, strengthening stuff. I would be on the bike. Then, eventually, I got down to one crutch one and a half months later. Two months later, I was completely off crutches. I had to be really careful, though. At that point, I started doing more bridges and clams. Lots of planking and core exercises, too. The biggest thing was engaging the glutes and not letting the lower back take over, or the hamstrings or the quads take over, because even though the hamstrings really did need work, it was more like where they attached to the glutes that really needed the support. (anonymous dancer 1, personal communication)

Returning to classical ballet following any surgery can be a long and difficult journey. During the recovery period, it is very easy for patients to take one step forward and two steps backward, and this can be extremely frustrating and demoralizing, particularly for individuals who have a strong love for a high-demand sport. As a result, Dr. Meere explains that for dancers, there needs to be a very careful recovery tactic: “You have to have a very special protocol to make sure they don’t go back too quickly or too ferociously, because otherwise, they can have complications associated with premature return to heavy stress activity” (personal communication, January 24, 2021). Then again, every high-level sport will have athletes who emphasize a quick return following a surgery.

Some studies have supported the idea that patients who participate in high-level sports experience a higher rate of return to the sport after surgery because of “a higher baseline of athletic functioning, improved access to postoperative physical therapy, [and] greater motivation to return to sports sooner” (Memon et al., 2019). Dr. Meere concurs that dancers are very dedicated to their physical therapy following a surgery, making their overall recovery period shorter (personal communication, January 24, 2021). When it comes to hip arthroscopies, studies have found that athletes will experience a high rate of return to their sport following the surgery (Memon et al., 2019). Although the risk factors surrounding hip surgery still need to be considered, the fact that high-level athletes have the capacity to fully return to their sports following hip arthroscopy is quite remarkable. Hearing firsthand how well a professional ballet dancer recovered from her surgery speaks volumes, and the knowledge surrounding acetabular labral tears is only growing, implying that acetabular labral tear repair surgeries and recovery will only become more efficient.

Conclusion

Dancers are always told that their bodies are their instruments and they must take care of them. If your instrument is not in the best condition it can be, execution of
the craft becomes substantially more difficult, particularly when the craft requires you to move your body in every way possible. Classical ballet dancers demand much from their bodies, and it is very easy for them to push past their physical limits. The body can endure only so much, and when it becomes subject to daily stressors, things can start to give way.

The acetabular joint is a vulnerable joint that is susceptible to injury, especially when it has an unnatural amount of pressure placed on it, which can be seen in the classical ballet technique. The extreme range of motion expected of ballet dancers can have a huge effect on the hip joint. Furthermore, the repetitive setup of ballet class can create damaging habits that lead to microtraumas, which could eventually lead to chronic injury. With acetabular labral tears in classical ballet, the constant external rotation of the femoral head in the acetabulum can create undue stress on the labrum, the fibrous cartilage that protects and stabilizes the hip joint. Because of unnatural force and torque of the legs, dancers are highly prone to acetabular labral tears. Additionally, when a dancer has structural abnormalities such as femoroacetabular impingement or hip dysplasia, the likelihood of labrum tearing increases automatically.

My hope for this thesis is to educate classical ballet dancers, specifically, on the prevalence of acetabular labral tears. Throughout this research process, I have gained a plethora of knowledge regarding hip labral tears and hip labral tears in dance, and as an athlete who depends on her hips for her career, I think it is crucial that I understand the mechanics behind the hip joint, especially because I have been diagnosed with an acetabular labral tear. The prevalence of acetabular labral tears is on the rise, so, how can we decrease the prevalence of this chronic injury in the dance world?
Glossary

<table>
<thead>
<tr>
<th><strong>Abduction</strong></th>
<th>movement away from the midline</th>
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<tbody>
<tr>
<td><strong>Acetabulofemoral joint</strong></td>
<td>more commonly referred to as the hip joint; a ball-and-socket joint</td>
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<tr>
<td><strong>Acetabulum</strong></td>
<td>the cup-shaped socket of the hip joint</td>
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<tr>
<td><strong>Acute injury</strong></td>
<td>an injury that occurs suddenly; a single traumatic event</td>
</tr>
<tr>
<td><strong>Adduction</strong></td>
<td>movement toward the midline</td>
</tr>
<tr>
<td><strong>Anterior</strong></td>
<td>relating to the front of the body</td>
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<tr>
<td><strong>Anteversion</strong></td>
<td>rotational deformity in which the femur twists forward (inward)</td>
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<tr>
<td><strong>Arthrogram</strong></td>
<td>a series of images done by MRI after injection of a contrast medium</td>
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<tr>
<td><strong>Arthroscopy</strong></td>
<td>an outpatient procedure used to diagnose and treat conditions in joints</td>
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<tr>
<td><strong>Asymptomatic</strong></td>
<td>exhibiting or showing no symptoms</td>
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<tr>
<td><strong>Chronic injury</strong></td>
<td>an injury that is constantly recurring or persisting for a long time</td>
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<tr>
<td><strong>Contrast</strong></td>
<td>a chemical agent that has magnetic properties that circulate through the bloodstream and get absorbed in certain tissues, which then stand out on an MRI scan</td>
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<tr>
<td><strong>Développé (to develop)</strong></td>
<td>a movement in ballet in which one leg is raised to the knee of the supporting leg, then unfolded to an extended position</td>
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<tr>
<td><strong>Dysplasia (of the hip)</strong></td>
<td>abnormal formation of the ball-and-socket joint</td>
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<tr>
<td><strong>Extension</strong></td>
<td>a straightening movement that increases the angle between body parts</td>
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<tr>
<td><strong>Femoroacetabular impingement (FAI) syndrome</strong></td>
<td>a condition in which the hip bones are irregularly shaped, causing them to rub together</td>
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<tr>
<td><strong>Flexion</strong></td>
<td>a bending movement that decreases the angle between body parts</td>
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<tr>
<td><strong>Flexor</strong></td>
<td>a muscle that flexes a joint</td>
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<tr>
<td><strong>Graston technique</strong></td>
<td>an instrument-assisted soft-tissue mobilization method that releases tension by helping to break down scar tissue</td>
</tr>
<tr>
<td><strong>Labral tear</strong></td>
<td>a condition in which the cartilage of the ball-and-socket joint is torn; cannot heal on its own</td>
</tr>
<tr>
<td><strong>Labrum</strong></td>
<td>a piece of fibrocartilage attached to the rims of the hip and shoulder sockets that acts as a cushion and helps keep the ball of the joint in place</td>
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<tr>
<td><strong>Lateral</strong></td>
<td>relating to the sides of the body</td>
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<tr>
<td><strong>Medial</strong></td>
<td>relating to the middle/center of the body</td>
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<tr>
<td><strong>Morphology</strong></td>
<td>refers to the size, shape, and structure of a given anatomical structure</td>
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<tr>
<td><strong>MRI (magnetic resonance imaging)</strong></td>
<td>a type of medical imaging test that can produce a detailed image of nearly every internal structure in the human body</td>
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<td><strong>Nonsteroidal anti-inflammatory drugs (NSAIDs)</strong></td>
<td>over-the-counter pain relievers (i.e., Advil, Motrin, Aleve)</td>
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<tr>
<td><strong>Physical therapy</strong></td>
<td>a rehabilitative treatment method that uses physical methods to help patients regain or improve their physical abilities</td>
</tr>
<tr>
<td><strong>Posterior</strong></td>
<td>relating to the back of the body</td>
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<tr>
<td><strong>Retroversion</strong></td>
<td>rotational deformity in which the femur twists backward (outward)</td>
</tr>
<tr>
<td><strong>Rotation (external/lateral)</strong></td>
<td>rotation away from the center of the body</td>
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<tr>
<td><strong>Subluxation</strong></td>
<td>a partial dislocation; a slight misalignment</td>
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<tr>
<td><strong>Synovial joint</strong></td>
<td>a connection between two bones consisting of a cartilage-lined cavity filled with fluid</td>
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<tr>
<td><strong>Turnout</strong></td>
<td>the external rotation of the hips, legs, and feet</td>
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References


Appendices

Appendix A

Dr. Patrick Meere (Hip Surgeon/Specialist) Interview Questions

1. Was there something that drew you to hip surgery specifically?
2. How would you describe a hip labral tear in lay terms?
3. How do you go about diagnosing a hip labral tear?
4. After the diagnosis, how do you proceed? Is surgery your first option? Or would you recommend physical therapy first or other forms of pain management?
5. Have you performed a hip labral tear repair surgery arthroscopically? How does it differ from a full hip replacement?
6. What percentage of a patient’s range of motion is expected to return after surgery (i.e., 100%, 90%, 75%, etc.)?
7. Have you ever treated a dancer for a hip labral tear? Did their surgical treatment differ from that of someone who is not a dancer?

Appendix B

Dancer Interview Questions

1. What prompted you to get your hip checked out?
2. When were you diagnosed with a hip labral tear?
3. On a scale of 1–10 (1 being minimal pain, 10 being the worst pain), how would you rate your pain prior to the surgery?
4. What did the pain feel like? What were your symptoms?
5. How long after your diagnosis did you opt for surgery to get it repaired? Did you do any physical therapy beforehand to try and alleviate the pain?
6. Talk me through the rehabilitation/recovery process after surgery. How did your hip feel in the months after surgery?
7. Do you feel like the surgery helped manage the pain?
8. On a scale of 1–10 (1 being minimal pain, 10 being the worst pain), how would you rate your pain after having had the surgery?
9. How would you rate your range of motion after the surgery?
Appendix C

Carrie Gaerte (Physical Therapist) Interview Questions

1. How do you assess a hip labral tear? What tests do you perform that could indicate a hip labral tear?
2. What type of nonsurgical treatment options do you give dancers who are diagnosed with hip labral tears?

3. How do different treatment methods, such as cupping, Graston technique, and dry-needling, help with pain management?

4. What is the rehabilitation process like after an arthroscopic hip surgery? In other words, how does the pain-management process (presurgery) differ from the rehabilitation/recovery process (postsurgery)?
A MEDIATIONAL MODEL OF RELIGIOSITY AND OBSESSIVE-COMPULSIVE SYMPTOMATOLOGY: THE ROLE OF GUILT AND SHAME IN A NONCLINICAL SAMPLE

LEON MARK PARKER, NORTHUMBRIA UNIVERSITY
MENTOR: LYNN MCIINNES

Abstract

High levels of religiosity have been associated as a precursor for obsessive-compulsive disorder (OCD) and obsessive-compulsive symptomatology (OCS), with previous studies finding positive correlations between the two variables. To date, however, the literature on the connection is limited, especially regarding nonclinical samples. The role of mediating variables has also been severely underresearched. The current study investigated the relationship between religiosity and OCS in a nonclinical religious-populace sample. It was hypothesized that strict followings of high religiosity would be associated with heightened OCS. Shame-proneness and guilt-proneness were additionally investigated and evaluated as potential mediators for the relationship of religiosity and OCS. A sample of 92 participants from the religious population participated in this nonclinical study, completing unique self-report questionnaires assessing guilt-proneness, shame-proneness, religiosity, and OCS. As hypothesized, there was a significant relationship between religiosity and OCS in this novel sample; however, this interaction was not mediated by guilt- and shame-proneness, although shame-proneness mediated the intellect dimension of religiosity. This therefore suggests that the association between religiosity and OCS in a nonclinical religious-populace sample cannot be explained by guilt- and shame-proneness. Future research should investigate the potential moderating impact of religious type/denomination and culture (external customs associated with a particular religious affiliation) separately to parse out the influence of these factors in the relationship, because of the stigma surrounding diagnosis and therapeutic help that is present and perpetuated in some religious cultures, remedying with a prescription of further prayer. Longitudinal designs and examination of other potential mediators in the relationship of religiosity and OCS (due to insignificant mediation), such as thought-action fusion (TAF), will also be an avenue for future research, as TAF has been found as a mediator in a clinical sample of this relationship.

Key words: religiosity, obsessive-compulsive symptomatology, shame, guilt, mediation
Introduction

Religion has through time been revered as a belief system to help understand and interact with the world and, in turn, to aid individuals in their daily lives and in dealing with day-to-day stresses. Scientific research has evidenced the positive influence of a belief system in people’s lives, with religion being associated with greater sense of self-esteem, sense of belonging, and emotional support (Krause & Wulff, 2005; Sharma & Singh, 2019). In juxtaposition to this, however, research has also indicated that particularly high levels of religiosity (religious aptitude) may counteract these positive influences and be associated with detriments to mental health.

One such mental health illness associated with high religiosity is obsessive-compulsive disorder (OCD), with highly religious individuals also being shown to have increased (if not diagnosable) obsessive-compulsive symptomatology (OCS). OCD is an anxiety disorder in which an individual has recurring and unwanted thoughts, otherwise known as obsessions. These obsessions compel the individual to act out behavioral rituals (compulsions). The condition has a lifetime prevalence of 1%–2% in the global populace (American Psychiatric Association, 2013; Krzanowska & Kuleta, 2017). The notion that high religiosity and OCD are associated was initially popularized by Sigmund Freud (1856–1939), who described religion as being similar to OCD, but with the obsessional rituals being universal rather than unique to the individual, and with both sharing similar feelings of guilt when these rituals were not completed. Research regarding the relationship between religiosity and OCD is limited, although a few scientifically objective studies have been published that investigate this relationship and demonstrate that the level of religiosity is positively associated with OCS and accompanying behaviors (Asghar et al., 2020; Ok & Gören, 2018; Zohar et al., 2005).

Ok & Gören (2018) conducted a study on the connections between religiosity and OCS and the role of personality traits in a nonclinical Muslim sample of 298 participants. Participants fell into three separate age groups: adolescents ages 16–19 (n = 32), young adults ages 20–35 (n = 219), and middle-age participants ages 36–66 (n = 47), with a gender distribution of 113 men (38%) and 184 women (62%). Notably, most of the participants in the study’s sample were studying in various Turkish universities. This study used the Brief Obsessive-Compulsive Scale (BOCS), which is a highly used assessment for diagnosing OCD and is based on the Yale-Brown Obsessive-Compulsive Scale (Bejerot et al., 2014). Also implemented in this study was the Ok-Religious Attitude Scale (Ok, 2016), developed to measure the degree of Islamic religiosity, appropriate for the study’s sample. The Big Five inventory, a 44-item scale developed by John and Srivastava (1999), was also used in the study to acquire a measurement and subsequent analysis of the role of personality on the OCS-
religiosity relationship in participants. The following study’s analysis concluded that there was a significant relationship between OCS and religiosity.

Zohar et al. (2005) conducted and reported on two studies regarding religiosity and obsessive–compulsive behavior in Israeli Jews. Both studies’ samples were collected via a snowball method, beginning with some people the authors knew personally and continuing from there. The first study had a sample of 256 volunteers, with all participants being Jewish undergraduate students, constituting 154 women (60.1%) and 99 men (38.7%). The second study’s sample consisted of 61 participants, with 30 who had been more religious but had relaxed their religious observance and 31 who had become more religious. On a four-category item, 14.8% described themselves as ultraorthodox, 34.4% as orthodox, 9.8% as traditional, and 41.1% as secular. The studies used different instruments. Study 1 used the Student Religiosity Questionnaire (SRQ) and the Obsessive Thought Checklist, and the Maudsley Obsessive-Compulsive Inventory (MOCI), which has four scales: checking, cleaning, doubt, and slowness. The MOCI was translated into Hebrew, then revised, being normed in a previous study (Zohar et al., 1995), expressing reliability and validity. Study 1 also used the Child-Adolescent Perfectionism Scale, as well as upbringing and background items. Study 2 uniquely used the Parental Bonding Instrument, which includes 25 items on a five-category Likert scale that have been translated into Hebrew (Canetti et al., 1997), assessing maternal warmth and control. Study 2 also used the MOCI and SRQ. This study found that individuals who changed from being less religious to being more religious scored highly on measurements of OCD.

Psychological theories of obsessions and compulsions have suggested for a long time that strict religious codes and moral principles that hold so much personal weight may be involved in the role of transforming typically occurring intrusive thoughts into clinically distressing obsessions. This also usually arises because the content and makeup of the intrusive thoughts are disturbingly personal to the individual (Inozu et al., 2014; Rachman, 1998). These moral principles also may contribute to the overvaluation of religious individuals’ thoughts, as intrusions involving blasphemous thoughts, images, or impulses have the propensity to draw attention quickly, which can result in an abundance of distress for a devout person. This emphasizes that strong religiosity may serve as a potential risk factor for OCS/OCD (Rachman, 1998; Rasmussen & Tsuang, 1986). The factors involved in this risk blossoming into a relationship between OCS-religiosity are, however, largely unknown and require future research.

The overarching issue with most studies investigating the relationship between religiosity and OCS/OCD is that they usually focus on simple bivariate correlations and therefore do not attempt to explain the phenomenon (Greenberg & Shefler, 2002). To understand the relationship of religiosity and OCS, investigation of the underlying mechanisms (mediators) is required. This therefore means that it is necessary to assess potential mediating factors of the relationship. This assessment
would help offer more holistic, informed insight into religious individuals who are likely to be vulnerable to distressing OCS. Furthermore, this would aid in the implementation of complementary preventive strategies; early interventions in particular have been shown to increase quality of life (Garcia-Grau et al., 2019). Additionally, more-effective interventions can be crafted to combat the relationship, which is a particularly pressing matter, as research has noted that religious themed-OCD may be more resistant to present treatments than are other manifestations (e.g., Williams et al., 2014).

Some research evidences that religious denomination, as well as other cultural influences, has an impact (in part) on the presentation of OCD symptoms (Sica et al., 2002). A study by Williams et al. (2017) provided a review on the OCS presented across different cultures and religions. In Christian samples, the obsessive symptoms reported most highly were obsessions regarding contamination and thought control. The Catholic subgroup, however, appeared to have prominence of perfectionism as an OCS trait, which emphasizes the uniqueness of branches of a particular religion on OCD presentation and their contrast. Compellingly, some study samples of washing behaviors appeared to be related to concerns about spiritual purity rather than physical contamination (Ghassemzadeh et al., 2005; Okasha et al., 1994).

One critique of studies investigating OCS among religious types/denominations is that they have focused primarily on a clinical sample of religious individuals with diagnosed OCD rather than researching the general religious populace (nonclinical sample), which is understudied (Al-Solaim & Loewenthal 2011; Asghar et al., 2020). As evidenced in Al-Solaim and Loewenthal’s (2011) study, some religious cultures/societies cause the OCD sufferer to not seek out diagnosis. Instead, the individual may be ushered toward incorrect spiritual-healer guidance prescribing additional prayer rather than professional help as treatment, which can alleviate immediate distress but act to maintain and/or increase religious OCS symptomology in the long term. Furthermore, occurrence of mental health stigma can deter individuals from seeking treatment and confirming diagnoses (Ali & Gul, 2018). Future research is therefore required to assess OCS in a nonclinical sample of religious individuals, to postulate whether this presence persists in this generalizable sample, potentially resulting from stigma/incorrect spiritual healer guidance (Mahintorabi et al., 2015).

Guilt has been shown to be associated with both high religiosity and OCS, being described as “where religiosity and psychology meet” (Wulff, 1996), and is also depicted as motivating OCD patients’ compulsions and obsessions (Malamateniou & Savvidou, 2018). Guilt is an emotion characterized by feelings of regret and remorse over one’s behavior and actions. There is some evidence that moderate levels of guilt can be beneficial in prosocial behaviors, motivating individuals to rehabilitate their behaviors and wrongdoing. There is also evidence that excessive guilt is present in an abundance of psychopathology (Adamczyk, 2017; Tilghman-Osborne et al., 2008).
Empirical research also indicates that highly religious individuals experience more guilt than nonreligious individuals. This may be because of immoral actions and/or thoughts leading to higher frequency of this self-inspective emotion (guilt) due to propagated commitment to virtue and avoidance of sin (Albertsen et al., 2006). One such study investigating guilt’s importance on this research topic was conducted by Inozu et al. (2012), in which it was found that highly religious Christians and Muslims had a higher likelihood of feeling more generalized guilt than did their nonreligious counterparts. This study also found that the relationship between religiosity and OCS were partially mediated by guilt. This is somewhat understandable, given that the basic Islamic and Christian doctrines stress the fear of God’s punishment as an important attitude.

In the regression analyses of their study, Inozu and colleagues (2012) found that guilt accounted for the majority of the variance between religiosity and obsessiveness. This comfortably and objectively led to the speculation that an enduring state of excessive guilt may cause religious individuals to become more distressed by unwanted, unacceptable intrusive thoughts and images. Guilt-ridden religious individuals with OCD may have difficulty directly confronting situations and thoughts that are perceived as deviation from perfect faith (Abramowitz & Jacoby, 2014). This study was also further supported by more recent literature, such as that from Inozu et al. (2020), yet again evidencing a mediation of guilt in the relationship. This further provided objective scientific support of the underlying mechanism’s importance in the relationship.

One critique of Inozu and colleagues’ (2020) study and other recent literature on the mediation of religiosity and OCS is that these studies primarily use samples of undergraduates, who are less likely to have experienced or attained their religiosity peak. A religiosity peak has predominantly been evidenced to be reached later in life; future research should therefore widen this demographic for generalizability purposes (Inozu et al., 2012; Petts, 2015). Furthermore, previous literature on this relationship has focused on one or two religions or denominations (Ok & Gören, 2018), thereby weakening the generalizability of the study’s data to the pool of religious individuals. The scope of religions and their denominations in this research should therefore be widened to improve generalizability of findings and to further improve insight into different religious practices’ unique idiosyncrasies in OCS manifestation (Williams et al., 2017). Because OCS is uniquely influenced by religious denominations, research should also measure this as such; the Obsessive-Compulsive Inventory (OCI) measurement in the study by Inozu et al. (2020) is a categorical and objective way to assess the subtypes of OCS and provide an objectively comprehensive total score (Foa et al., 1998).

Shame, like guilt, is a self-reflective emotion; however, it is provoked by moral/personal transgressions and failures, in which the self is judged as being flawed and impure. In addition, this self-reflective emotion functions as a barometer of the
achievement of internalized moral standards, being a motivation for change (Dickerson et al., 2004; Tangney et al., 2007). Shame, however, has not been investigated as a mediator in the relationship between religiosity and OCS. A paucity of research exists regarding this emotion even in relation to psychopathology, religiosity, and OCD separately, therefore requiring further research (Weingarden et al., 2016).

Regarding literature that investigates guilt, research has pointed out that this “guilt” should be viewed as guilt with shame (Tangney, 1996). Guilt is usually described as a bad feeling concerning the overall self, and it is assumed that the individual feels bad. Research shows that this does not specifically hold true, however. In guilt, the focus is directed on a particular behavior and not on the self. It is instead in shame where the focus lies on the self; therefore, in guilt, one says, “I did that horrible thing,” and in shame, one says, “I did that horrible thing” (Tangney, 1996). In reflection, the fact that guilt and shame are often confused with each other therefore makes it necessary from a theoretical point of view to parcel out shame from guilt, and vice versa, to allow assessment of the unique effects of both. The previous literature on guilt’s mediation of religiosity and OCS may thus be flawed because of a failure to account for shame and its symbiotic relationship with guilt; shame may act as a confounding variable and affect the results of said research (Inozu et al., 2020). This would therefore call for shame to be assessed as (a) a covariate in the mediation of the relationship of religiosity and OCS or (b) a mediator of the relationship, which previous literature has failed to do (Inozu et al. 2020; Luyten et al., 1998).

The relations between shame, anxiety disorders, and OCD have recently been examined in a meta-analysis by Cândea and Szentagotai-Tătar (2018). This analysis found significant medium effect-size associations between shame, nonspecific anxiety symptoms, symptoms of several anxiety disorders (i.e., generalized anxiety), and OCD symptomology. Furthermore, elevated levels of state shame in individuals with OCD diagnosis (in contrast to healthy controls) were evidenced in a study that included individuals with moral/nonmoral obsessions (which place particular emphasis in scrupulosity) and a control group. This provides motive for the notion that shame may potentially play a mediating role in the relationship of religiosity and OCS, and its importance in perpetuating high religiosity and OCS, respectively (Szentágotai-Tătar et al., 2020).

On this basis, the aims of the present study were (1) to investigate the relationship between religiosity and OCS in a nonclinical sample of the religious populace of numerous religions/denominations and (2) to establish whether self-reported measures of shame-proneness and guilt-proneness mediate the relationship between religiosity and OCS in this sample. It was hypothesized that increased religiosity would be associated with an increase in OCS and that shame-proneness and guilt-proneness would fully mediate the link between religiosity and OCS in the study sample.
Methodology

Design

This study used a quantitative correlational design. The predictor variable in the study was religiosity (devoutness of religion), and the outcome variable was obsessive-compulsive symptoms. Guilt and shame were the potential mediators investigated in this interaction. A mediational analysis was therefore selected to accurately infer whether guilt and shame mediated the relationship between predictor and outcome variables.

Participants

A priori power analysis with G power based on an alpha value of 0.5 and a power value of 0.80 indicated that $N = 77$ would be adequate to significantly determine the role of guilt and shame in the interaction between religiosity and OCS with a medium effect size ($F^2 = 0.15$). An opportunity sample of 118 participants provided consent to take part in the present study; however, 21 participants failed to complete the survey successfully and were therefore removed from the data set. Furthermore, Z scores were calculated for each participant’s total score for each scale. A benchmark of $\pm 3.29$ was used because Tabachnick and Fidell’s (2013) multivariate statistics indicated that this benchmark was reliable in terms of data omission. One participant’s data exceeded the benchmark Z score of $\pm 3.29$ for the OCI total, and that participant’s data were therefore excluded from this study because of the potential data skew with this outlier. No other outliers were found in any of the other measures using this benchmark score. Furthermore, the amount of time taken by participants to complete the study was recorded. All recorded times of respondents who successfully completed the study met the expected minimum threshold of five minutes; therefore, no participants were removed for unreliable results regarding this.

Statistical analysis was then conducted on a final sample of 92 participants who completed the study in its entirety. Demographics indicated the following religion/denomination and quantities: 26 Catholic, 13 Muslim, 29 Christian, 5 Protestant, 3 Hindu, 5 Buddhist, 1 Jewish, and 10 “Other.”

Participants were recruited online via social media platforms. The exclusion criteria were maintained as inclusively as possible to reach the desired sample size, excluding from participation only individuals under the age of 18 and nonreligious individuals. Participants did not receive any financial or other remuneration for their contribution in this study.
Measures

The demographic information for religious denomination was embedded in the first page of the survey, then followed by the three self-report measures detailed below (no reverse scoring was required).

**Obsessive Compulsive Inventory**

The Obsessive Compulsive Inventory (OCI) involved 42 statements scored on a 4-point Likert scale, with low scores indicating low OCS and high scores indicating high OCS. This inventory was employed to measure participants’ OCS and accompanying behaviors. The inventory comprised seven unique subscales: Washing, Checking, Doubting, Ordering, Obsessions, Hoarding, and Neutralising. Total possible cumulative scores for OCI ranged from 0 to 168.

A revised version of this inventory was used to measure OCS in a recent study regarding guilt’s mediation of the research topic (Inozu et al., 2020), with reliability being good (Cronbach’s alpha = 0.90). In relation to previous studies, this study achieved a Cronbach’s alpha of 0.96, which expresses very good reliability of this measurement in this study.

**Guilt and Shame Proneness Scale**

The Guilt and Shame Proneness scale (GASP) is a 16-question scale (eight questions each for Guilt and Shame) answered using a 7-point Likert scale. This scale was employed in this study in order to self-report participants’ levels of guilt- and shame-proneness regarding the scenario-based questions. High scores indicated high guilt/shame, and low scores indicated low levels of guilt/shame (Cohen et al., 2011). This scale contains four subscales: two subscales assigned to guilt—Guilt-Negative-Behavior-Evaluation (NBE) and Guilt-Repair—which merge to create a total guilt score, and two shame subscales—Shame-Withdraw and Shame-Negative-Self-Evaluation (NSE)—which merge to form an overall shame score.

Total possible scores for GASP ranged from 16 to 112, with each possible subscale total ranging from 4 to 28. The GASP scale’s reliability exceeded the benchmark (Cronbach’s alpha = 0.60), demonstrating evidence of reliability, given that the GASP is a scenario-based measure with only four items in each subscale (Cohen et al., 2011). In relation to previous studies, this study achieved a Cronbach’s alpha of 0.76, which indicates satisfactory reliability of the measure in this study.

**The Centrality of Religiosity Scale**

The Centrality of Religiosity Scale (CRS-15) involves 15 questions scored on a 5-point Likert scale, with low scores indicating low religiosity and high scores
indicating high religiosity (Huber & Huber, 2012). The scale was employed in this study to measure the degree of participant religiosity. Participants were asked to rate their levels of religiosity, with questions focused on five subscales: Intellect, Ideology, Public Practice, Private Practice, and Experience.

A recent study by Abbasi et al. (2019) investigated the reliability of the CRS-15 and assessed the internal consistency of the CRS-15 items as equating to a Cronbach’s alpha of 0.773, indicating satisfactory reliability, especially for scale translation (such as in Urdu). Furthermore, there were high correlations between CRS-15 values in relation to self-reports upon importance of religion for daily life, with coefficients of 0.78 in a student sample and 0.67 in the international Religion Monitor (Huber, 2004; Huber & Krech, 2008). In relation to these previous studies, this study achieved a Cronbach’s alpha of 0.96, presenting very good reliability.

Procedure

This study received full ethical approval from the Health and Life Sciences Research Ethics Committee at Northumbria University. Complete study information was presented to participants via the Qualtrics platform. Informed consent was also provided by all participants included in the study, following the participant information sheet. After providing consent, participants completed an electronic survey assessing guilt-proneness, shame-proneness, religiosity, and OCS. Prior to completing the study’s questionnaires, participants provided demographic information solely about their religion/denomination.

This study took approximately 5–10 minutes to complete. Participants completed this survey using their own personal electronic devices and in their own time. A debrief was also presented to the participants after study completion. Responses to the online survey were automatically logged using Qualtrics system, with all data in this study collected between December 2020 and January 2021. IP addresses, which were automatically collected from participants via Qualtrics, were removed and deleted after exportation of data to SPSS. Data analysis then took place using a bootstrapping macro.

Statistical Analysis

Prior to analysis, the quality of the study’s data was checked using normality testing via the statistical program SPSS. With visual inspection of the data distribution via histogram (which was provided via this specific test), it is apparent that for each measure, abnormal distribution of data is observable. This observation was also further supported by a significant Shapiro–Wilk value for each individual measure. Inverse distribution functions were, however, not required to fix the data distribution in this instance, as SPSS PROCESS uses bootstrap resampling, which circumvents this issue (Bland & Altman, 2015). Pearson’s bivariate correlations were
also conducted so as to examine the associations between all study variables, most particularly OCI and CRS-15 scores.

The SPSS PROCESS macro (model 4) with bootstrapping (INDIRECT), as per Hayes (2018), was utilized in this study to assess the indirect/direct association/relationships between perceived shame-proneness, guilt-proneness, religiosity, and OCS. The study’s mediational results are based on the conduction of 5000 bootstrapped samples, with 95% confidence intervals.

The conducted bootstrap mediation analyses are represented in Figure 1 (model 1), Figure 2 (model 2), and Figure 3 (model 3). For models 1 and 2, each mediator was analyzed as a mediator separately in its own statistical model, with the other mediator analyzed as a covariate because of the significant correlation of shame and guilt, there being need to parcel this out for reasons of validity. This analysis permitted the determination of the direct relationship between CRS-15 scores and OCI scores without the presence of mediating variables (path c). The relationship between CRS-15 scores and of both mediators of interest (path a) and between these mediators and the OCI scores (path b) was successively established.

To establish whether shame-proneness scores or guilt-proneness scores fully mediated the relationship between CRS-15 scores and OCI scores, two conditions must be met: (1) the confidence intervals relating to the indirect effect between CRS-15 scores and OCI scores, via the relevant mediator in the analysis, do not overlap with 0, and (2) the direct effect between CRS-15 scores and OCI scores, when the mediator is included in the model (path c’), need to become nonsignificant. Providing that just the first of these conditions was met, leads to the conclusion that partial mediation had occurred (religiosity’s influence on OCS reduced after mediator was controlled for). For all mediational analyses, significance was considered at the $p < 0.05$ level (two-tailed).
Figure 1. Model of Religiosity as a Predictor of OCS, Mediated by Guilt-Proneness (Shame as a Covariate)

Note: The CI for the indirect effect is a bias-corrected and accelerated (BCa) bootstrapped CI, which is based on 5000 samples.
Figure 2. Model of Religiosity as a Predictor of OCS, Mediated by Shame-Proneness (Guilt as a Covariate)

Note: The CI for the indirect effect is a bias-corrected and accelerated (BCa) bootstrapped CI, which is based on 5000 samples.
Figure 3. Model of Intellect (Dimension of Religiosity) as a Predictor of OCS, Mediated by Shame-Proneness

![Diagram of model showing paths and coefficients]

**Note:** The CI for the indirect effect is a bias-corrected and accelerated (BCa) bootstrapped CI, which is based on 5000 samples.

**Results**

Table 2 and its corresponding mediation were exploratory analyses to assess whether singular dimensions of religiosity were mediated by shame/guilt in the relationship of OCS. Furthermore, the box plot in Figure 4 provides a visual inspection of religion/denomination and the associated degree of OCS and is another exploratory analysis in the current study. All other analyses specifically corresponded to the current study's research question hypothesis.

**Correlational Analyses**

In testing if mediation occurs, significant associations are expected between (a) the predictor and the mediator, (b) the mediator and the outcome, and (c) the predictor and the outcome (Baron & Kenny, 1986). As hypothesized, religiosity was significantly associated with OCS, $r = .377$ (Table 1). Religiosity scores were not correlated with either guilt- or shame-proneness ($r = -.52$ and $r = -.117$, respectively). Shame-proneness and guilt-proneness were, however, significantly positively correlated with each other ($r = .619$)
Table 1. Correlation Coefficients Between All Study Variables (N = 92)

<table>
<thead>
<tr>
<th></th>
<th>Religiosity</th>
<th>Guilt</th>
<th>Shame</th>
<th>OCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religiosity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guilt</td>
<td>–.052</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shame</td>
<td>–.117</td>
<td>.619**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCS</td>
<td>.317**</td>
<td>–.020</td>
<td>.229*</td>
<td></td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (two-tailed). **Correlation is significant at the 0.01 level (two-tailed).

Table 2 includes all five dimensions of religiosity with outcome and mediator variables. Significant correlations were found between intellect and shame (r = –.288, p = .29) and between shame and OCS (r = .229). This therefore led to running a mediation using these variables.

Table 2. Correlation Coefficients of Study Variables With the Five Dimensions of Predictor Variable (N = 92)

<table>
<thead>
<tr>
<th></th>
<th>Intellect</th>
<th>Ideology</th>
<th>Public practice</th>
<th>Private practice</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shame</td>
<td>Pearson correlation</td>
<td>–.288*</td>
<td>–.064</td>
<td>–.125</td>
<td>–.022</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.29</td>
<td>.546</td>
<td>.237</td>
<td>.838</td>
</tr>
<tr>
<td>Guilt</td>
<td>Pearson correlation</td>
<td>–.188</td>
<td>.007</td>
<td>–.073</td>
<td>.082</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.073</td>
<td>.946</td>
<td>.490</td>
<td>.436</td>
</tr>
<tr>
<td>OCS</td>
<td>Pearson correlation</td>
<td>.303**</td>
<td>.246*</td>
<td>.229*</td>
<td>.256*</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.003</td>
<td>.018</td>
<td>.028</td>
<td>0.14</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (two-tailed). **Correlation is significant at the 0.01 level (two-tailed).
Mediation of Relationship Between Religiosity (CRS-15) and OCS (OCI) by Shame and Guilt (GASP)

Visual diagrams of the nonmediated relationships are depicted in Figures 1 and 2. In addition, Figure 3 depicts a partial mediation of the religiosity dimension Intellect and its relationship with OCI via shame-proneness. CRS-15 scores were not significantly associated with GASP’s shame and guilt scores (path a); however, shame and guilt were both significantly correlated/related to OCI scores (path b).

With respect to the indirect effects of CRS-15 and OCI scores, significant effects were not observed, therefore expressing that the bootstrapped confidence interval of the indirect effect of this pathway included 0. It is thus believed to not have occurred via the (mediator) shame and guilt scores. For each model (Figures 1 and 2), the direct effect between OCI and CRS-15 scores (known as path c’) remained significant when each potential mediator was considered; therefore, neither shame nor guilt scores mediated the relationship between CRS-15 and OCI. In comparison, model 3 (Figure 3) also showed this significance, although for the indirect effect, the confidence interval (CI) did not overlap with 0, indicating that partial mediation occurred.

In model 1 (Figure 1), there is an approximate 10% variance, which is accounted for by the study’s predictor variable ($R^2 = 0.10$). Comparatively, in model 2, an approximate 17% of the variance was accounted for by the predictors ($R^2 = 0.17$). This is providing the nonfocused mediator of each model was not placed as a covariate during analysis, like in Figures 1 and 2, where variance of approximately 22% was accounted for via the study’s predictor variables ($R^2 = 0.22$) in each model. In model 3, with Intellect (a dimension of religiosity) as the predictor variable, an approximate 19% of the variance was accounted for by the study’s predictor variables ($R^2 = 0.19$).

Denomination and OCS Box Plot Data

As seen in Figure 4, the average OCS total of Muslim participants was exceedingly greater than that of any other denomination. A total median score of 80, in comparison to the next highest denomination score of 45, evidences the high levels of reported OCS in the Muslim populace of the current study.
Discussion

The overall aims of this investigative study were examine the relationship between religiosity and OCS and to investigate shame-proneness and guilt-proneness as mediators underlying the previously evidenced relationship between religiosity and OCS. It was hypothesized that religiosity would be related to experiencing more OCS and that shame-proneness and guilt-proneness would both fully mediate the link between religiosity and OCS. The analyses conducted supported the relationship between religiosity and OCS but did not support the relationship resulting from mediation regarding shame-proneness and guilt-proneness.

Through conduction of bivariate correlations, the current study was able to produce empirical evidence significantly demonstrating that high levels of religiosity are also associated with the experience of higher levels of OCS. The results of this study provide additional support to the small body of previous literature stating the positive association of these two variables (Asghar et al., 2020; Ok & Gören, 2018). In addition, the current study also provides support toward the cognitive model of OCD (proposed by Salkovskis, 1985) and its relation to religiosity. Cognitive behavior models of OCD and scrupulosity propose that dysfunctional beliefs are conceptualized as causing the individual to incorrectly interpret intrusive thoughts as meaningful and significant. The significant findings in this study further support religion fitting this model, that these strict moral religious principles can result in faulty appraisal of intrusive thoughts in some individuals, thus leading to compulsions such as prayer to
extinguish the heightened anxiety (Nance et al., 2018; Obsessive Compulsive Cognitions Working Group, 2003).

In contrast to the promising findings that were demonstrated in this current study, some polarizing results were also found. Guilt and shame were both found to have a nonsignificant relationship with religiosity. This nonsignificant correlation of guilt (self-introspection) is dissimilar to the findings of previous literature on the topic (e.g., Inozu et al., 2020). The research of Inozu and colleagues (2020) diverges from the current study because their research sample was focused exclusively on Islamic undergraduates, whereas the current study used a sample of religious individuals from numerous faiths and without inclusion criteria of being an undergraduate. Furthermore, shame was not analyzed in Inozu and colleagues’ study, which is a weakness in comparison to the current study, as shame and guilt have a symbiotic relationship and shame needs to be used as a covariate in the mediational analysis of guilt (Tangney, 1996), which the current study used accordingly. Inozu and colleagues (2020) may therefore have measured the mediation of guilt in the relationship inefficiently.

In addition, the findings of the current study were polarizing to the proposed hypothesis anticipated because of the results of recent and past literature. This result was therefore concerning, as for successful mediation to have occurred, it is important that shame and guilt (the selected potential mediators) be significantly related with both the predictor and outcome variables. The conducted mediation models in this study further indicated that mediation did not occur with the study’s variables (Baron & Kenny, 1986).

Additionally, however, because of the CRS-15 measurement dividing religiosity into five dimensions, bivariate correlations were also run on these dimensions in accordance with the current study’s mediators and outcome variable. Surprisingly, the intellect dimension was found to be significantly related to both shame-proneness and OCS. A mediation analyses was promptly conducted and indicated partial mediation (due to CI interval not overlapping with 0), which is a novel and interesting finding. This mediation, however, was not present when guilt was controlled for, potentially indicating that the self-reflection that encapsulates both these mediators may be difficult to parcel out, hence the significant correlations between each mediator in question (Tangney, 1996). Intellect as a dimension of religiosity, however, entails desire to seek out answers and questioning of religious elements. This dimensional measurement therefore may serve as a barometer for questioning of the religious participant’s doctrine. A study by Exline et al. (2020) found that when individuals mature in age and a sense of authority associated with religious teachings reduces, space for doubt emerges. This can be quite distressing for the individual. These questioning intrusive thoughts can also potentially be perceived as blasphemous to the individual, resulting in feelings of guilt and shame. As previous literature indicates, religious intrusive thoughts cause compulsions to pray so as to
circumvent the resulting emotions (Abramowitz & Buchholz, 2020). This mediational model focusing on the dimension of intellect may therefore indicate that this aspect of religiosity and its relationship to OCS is mediated by shame-proneness.

Interestingly, as this study used the OCI measurement, which measures OCD presentation, box plot data of OCS and denomination indicated that Muslim participants’ average OCS scores appeared to be exceedingly higher than those of the participants of other religions/denominations in the current study. These results appear to reflect and converge with previous literature using clinical samples of religious OCD participants. The current study’s data mirror that OCD symptoms are more common in Muslim countries and Orthodox Jewish people compared with Christians and other faiths from Western cultures, with religious type/denomination also affecting the intensity of OCD symptomology and even religiosity. Furthermore, the current study emphasizes the vulnerability of OCS in a nonclinical sample regarding this Islamic affiliation (Inozu et al., 2012; Yorulmaz et al., 2009). Because of the current study finding that guilt and shame were not mediators in the relationship of the nonclinical religious sample, it may be speculated that guilt and shame may have varying or nonexistent mediation upon OCS-religiosity dependent on the individual’s religion/denomination. For instance, guilt has been shown to be a significant mediator of religiosity and OCS in the Muslim populace, as evidenced by Inozu and colleagues’ 2020 study. This may therefore indicate that unique methodological expertise is required to treat patients’ OCD symptomology dependent on their religious branches/denominations, the underlying mechanisms for the relationship being unique to the doctrine. Cultural competence and education on the part of the therapist, as well as a comprehensive understanding of a patient’s belief system, are therefore essential (Chapman et al., 2014).

In addition, a study by Al-Solaim and Loewenthal (2011) focusing on religious individuals dealing with OCD found that all the Muslim participants first approached faith-based healers rather than mental health professionals for their religious-themed OCD (scrupulosity). Because having a fear of God is a cherished attitude in Muslim worship and is one of the elements of Islamic doctrine (Inozu et al., 2012), imams or members of the clergy (faith healers) may potentially be providing advice that perpetuates OCD symptoms and even delaying treatment-seeking and diagnosis.

Findings of the current study must, however, be considered in the light and context of the study’s limitations. Foremost, the cross-sectional design of this study is not complementary for the testing of mediational effects, including drawing of casual inferences from data. Future research may therefore operate causality more effectively with the use of prospective studies. Furthermore, because of the symbiotic and sometimes complexing nature of guilt and shame’s relationship, researchers may also wish to implement functional magnetic resonance imaging measures, as these have shown promising evidence in objectively differentiating the self-inspective emotions measurably (Zhu et al., 2019).
Previous research has indicated that religious denomination has an impact on the presentation of OCS. The current study therefore listed religious denomination as a demographic to analyze the impact of specific doctrine on the presentation of OCS symptoms (Buchholz et al., 2019; Yorulmaz et al., 2009). The religions/denominations in the current study did not have equal weighting, however. Although a G-power priori analysis indicated that the study’s sample size was efficient to determine the role of guilt and shame as mediators in the research topic, sample size was too small (only one Jewish participant took part in this study) to offer scientifically objective data on the influence of denomination on OCS representation. This is due to small sample sizes being more likely to be affected by individual differences, therefore causing potential to skew the data and reduce the validity of findings (Pfund et al., 2020).

Furthermore, the mediating factors in the relationship of religiosity and OCS may potentially deviate depending on religion type/denomination due to the OCS presentation being dispersed because of the religious principles (Sica et al., 2002). This has been evidenced by a previous study conducted by Inozu et al. (2014) which indicated that “disgust sensitivity” only mediated religiosity and several subsets of OCS, such as washing and checking in Muslim participants. The data fit the evidence base, as Muslims have shown in previous research to have emphasis of OCS presentation regarding purity compared to other religious groups, which may therefore indicate that significance of mediators involved in the relationship of religiosity and OCS are influenced and/or moderated by religion type/denomination (Williams et al., 2017).

Future research should therefore investigate participant samples of specific religions/denominations separately because of the uniqueness of each category on OCD representation, as well as potential mediational differences. It may be difficult to generalize results across religions; research should therefore focus on mediating factors in the relationship of religiosity and OCS regarding each religion/denomination separately. In addition, as culture has been evidenced as a transmissible force for religious code and principles (Beyers, 2017; Sica et al., 2002), a variable for the individual’s culture should also be placed in the analysis as a covariate to attempt to parcel out culture from religion via placement in a multiple regression to evaluate the impact of this societal influence on the relationship as a potential moderator. A culture variable would be a construct to help infer the societal ideas, social behaviors, and religiosity of the individual’s society. Questions that can be asked to identify one’s culture may be the country they reside within, the community/family they live within, and the associated societal norms (Beyers, 2017)—for example, “Is shunning a family member for renouncing religion an acceptable practice in your community?” This moderator potentiality has been indicated by dominant-Muslim and -Jewish cultures having stricter religious foundations as well as higher religiosity than Western cultures. This therefore may serve as a confounding variable in mediational analyses of the research topic (Yorulmaz et al., 2009).
Despite the above-mentioned limitations of the current study, one notable strength of the study is that it assessed OCS in a nonclinical sample of religious individuals, which in turn led to more generalizability of the study’s findings. One reason this is an important strength is that those with diagnosed OCD, specifically in highly religious cultures, have a much higher propensity than those without diagnosed OCD to exhibit scrupulosity regarding the moral codes provided by their society. In addition to this, the accompanying faulty appraisal of intrusive thoughts common in some religions can encourage and nourish OCD in susceptible individuals (Nance et al., 2018); hence, a nonclinical sample of religious participants allowed for the attainment of data of OCS regarding religiosity that was generalizable and not disproportionately influenced by potentially innate psychopathology and/or uniquely disturbing personal experiences (Bozorgmehr et al., 2017).

Additionally, an online basis for distribution of study questionnaires was administered using Qualtrics. The use of an online platform for the current study allowed the reduction of burden-of-time pressure on the participants who took part in the study and made the study particularly easy to administer, in addition to providing more-trustworthy and improved perception of anonymity (Branley et al., 2014). The study was also of short duration, which reduced order effects and increases reliability of the data collected, coupling to improve objectivity of the data (Linek, 2017).

The implications of this study raise awareness toward the OCS/religiosity relationship also being present in a nonclinical sample of religious individuals, regardless of religion/denomination. In addition, the partial mediation of intellect and OCS via shame-proneness also indicates that this intellectual seeking of religious individuals may serve to cause feelings of shame, which perpetuates OCD symptomology. The current study may indicate a need for further research regarding tailored psychological interventions for combating shame in the OCS-religiosity relationship. This sort of intervention can be provided using therapy such as compassionate mind training (CMT), which acts to reduce feelings of self-criticism, shame, and negative self-reflection. This therapy focuses on helping people understand that the way the human brain has evolved has made us vulnerable to rumination, negativity bias, and self-critical self-monitoring. These insights act to shift attention from blaming and shaming the self for these difficulties to how to work with them compassionately (Gilbert & Procter, 2006). CMT involves practices to develop physical and mental competencies to facilitate self-grounding as well as the ability to slow down, taking a compassionate focus and orientation to self and to others, and to work with life difficulties. A study by Matos and colleagues (2017) conducted a pilot randomized controlled study using this form of therapy and found significant improvement in the experimental condition regarding self-compassion and self-kindness, which, if employed in religious individuals, may help to reduce negative self-reflection and therefore theoretically act to subdue the intensity of OCS.
In conclusion, to date, research on the topical area of religiosity and OCS has focused primarily on undergraduate samples employing participants from one or two religions/denominations. Findings from the current study add to previous literature, indicating that this relationship is present in a nonclinical sample of the religious populace, and support an emphasis for stigma regarding OCS in religious groups/cultures needing to be broken down. Furthermore, this study suggests that shame and guilt do not mediate this relationship in the study’s participant populace but that intellect as a dimension of religiosity is mediated by shame-proneness. These findings therefore contribute valuable insight into the underlying mechanisms that operate this religiosity-OCS association, acting as a conduit for future research.
References


DETERMINANTS OF SUBJECTIVE MEMORY IN FIRST-DEGREE RELATIVES AND CARE PROVIDERS OF INDIVIDUALS WITH DEMENTIA

CASSIDY TIBERI, SOPHIA DEMERDJIAN, BUTLER UNIVERSITY
MENTOR: TARA LINEWEAVER

Abstract

Subjective memory may help practitioners understand who pursues assessment and treatment for memory concerns. Two factors that are related to subjective memory are depressive affect and fear of dementia, and two groups of older adults who may be susceptible to these factors are first-degree relatives and care providers of patients with dementia. This study seeks to determine how depressive affect and fear of dementia influence the subjective memory of these two groups. Fifty-five adults ages 55 and older who were care providers and/or first-degree relatives of patients with dementia reported their perceptions of their own memory, feelings of depression, and dementia worry on a Qualtrics questionnaire. We anticipated that depressive affect would be a stronger predictor of subjective memory in care providers than in first-degree relatives, whereas dementia worry would be a stronger predictor of subjective memory in first-degree relatives than in care providers. Additionally, we hypothesized that the relationships between subjective memory and both depression and dementia worry would be strongest for individuals who were both first-degree relatives and care providers. Overall, our hypotheses regarding differential patterns of relationships across groups was not supported; however, results showed that depression was the strongest predictor of subjective memory, regardless of group affiliation. Additionally, correlation analyses revealed strong relationships between fear of dementia and depression among both care providers and first-degree relatives. By better understanding the lack of influence of a fear of dementia and the strong influence of depression on the subjective memory of these two populations, clinicians may be better equipped to support older adults with memory concerns.

Subjective memory, which includes the concept of memory self-efficacy, is a construct that has been given significant attention in the current literature. Memory self-efficacy has been defined as “beliefs about one’s own capability to use memory effectively in various situations” (Hertzog et al., 1989, p. 687). Subjective memory is important because it may help researchers and practitioners understand who seeks help for concerns about their memory. For example, one study compared 33 healthy individuals who sought help at memory clinics to 85 participants who did not. The
researchers found that those who presented to memory clinics with subjective complaints scored lower on a measure of memory self-efficacy than did their non-help-seeking peers (Ramakers et al., 2009). As such, gaining a better understanding of subjective memory may provide clinicians with useful information as they support and care for patients.

One important factor that influences subjective memory is depression (Cipolli et al., 1996; Dellefield & McDougall, 1996; Mendes et al., 2008; Niederehe & Yoder, 1989). Cipolli et al. (1996) reported that among 400 adults in the general population aged 50–88, depressed individuals had lower scores on all objective and subjective memory measures when compared to their nondepressed peers. Similarly, Dellefield and McDougall (1996) found that among 145 community-dwelling older adults, individuals with depression scored lower in memory self-efficacy than did nondepressed participants. The relationship between depressive affect and subjective memory holds even among nondepressed adults. Mendes et al. (2008) found significant correlations between self-reported symptoms of depression and subjective memory complaints in 292 healthy individuals in the general population.

Another factor that may influence subjective memory is older adults’ concern about developing dementia in the future. These concerns are quite prominent in the general population. Across a sample of 219 adults aged 40 and older, nearly half were at least somewhat concerned about developing dementia (Bowen et al., 2018). These findings are nearly identical to those from another study of 193 adults aged 65 and older, in which close to half of the participants were at least “somewhat concerned” and one-sixth reported being “very concerned” that they would develop dementia at some point in the future (Norman et al., 2018). These same studies investigated the relationship between dementia worry and subjective memory and yielded consistently significant results. Bowen et al. (2018) found that dementia worry was associated with perceived memory capacity and perceived memory change in a sample of healthy older adults. Norman et al. (2018) also found that being more concerned about developing dementia was associated with a higher self-reported frequency of forgetting. Thus, there appears to be a robust relationship between stronger fears of developing a neurodegenerative disorder and lower memory self-efficacy.

Two groups of older adults who are particularly vulnerable to depression and concerns about developing dementia are family members and care providers of individuals with dementia. One common cause of dementia is Alzheimer’s disease (AD), a neurodegenerative disease that progressively interferes with memory and other cognitive skills as well as the ability to carry out everyday tasks (National Institution for Aging, 2019). According to the CDC, in 2014, more than 5 million Americans were living with AD (2019). Because of AD’s widespread nature, family caregivers are heavily involved in the daily lives of their loved ones, providing approximately 70% of healthcare to AD patients in the United States (Alzheimer’s Disease International, 2010). As such, AD and other forms of dementia affect not only
the diagnosed patients but also their family members and care providers, who may be vulnerable to depression and anxiety about someday developing the disease themselves.

Many studies have examined the potential negative affective outcomes that can result from caring for an older adult with severe memory loss (Mausbach et al., 2013; Wang et al., 2015). Mausbach et al. (2013) found that spousal caregivers were more likely to meet the cutoff for clinically significant depression than were their non-caregiving peers, although not all studies demonstrate this effect (see, for example, Tang et al., 2015). Wang et al. (2015) also identified greater depression in individuals caring for a family member with dementia, documenting a significant effect of stress on caregivers’ self-reported depression. Although together, these findings provide some understanding of how caring for a family member with dementia influences depression, research to date has not examined depression in non-care-providing first-degree relatives of dementia patients.

In contrast, research on dementia worry has centered more prominently on first-degree relatives than on care providers (Kessler et al., 2014; Rahman, 2016). Kessler et al. (2014) found a strong positive relationship between being a first-degree relative of a patient with dementia and dementia worry, such that first-degree family members have more concerns about developing dementia themselves than their peers do. To the contrary, Rahman (2016) found no statistically significant differences in fear of AD between participants who did and did not have a first-degree family member with dementia. Although concerns about developing dementia have not been directly investigated in care providers, given the prevalence of anxiety regarding dementia (Bowen et al., 2018; Norman et al., 2018), care providers are unlikely to be immune to dementia worry.

Given that first-degree relatives are highly prone to concerns about developing dementia (Kessler et al., 2014; Rahman, 2016), and given that these concerns are associated with lower memory self-efficacy (Bowen et al., 2018; Norman et al., 2018), it is, perhaps, not surprising that several studies have documented lower subjective memory in first-degree relatives of patients with dementia (Hausmann et al., 2018; Tsai et al., 2006). In a study by Hausmann et al. (2018), a group of 10 healthy older adults who were first-degree family members of patients with AD reported more concerns about their own memory than did a group of individuals without a family history of AD. This effect of shared genetics was also documented in a much larger-scale study by Tsai and colleagues (2006), who found a greater incidence of subjective memory complaints in 1203 first-degree relatives of patients with AD than in 296 spouses of similar patients. This effect has not always been consistently documented in the literature. A study by McPherson et al. (1995) did not find significant differences between first-degree family members and an age- and gender-matched control group with regard to memory complaints following a neuropsychological assessment. Another study, performed by Heun et al. (2003), compared the subjective memory of
first-degree relatives of AD patients, first-degree relatives of patients with major depressive disorder, and a control group and found no significant differences in subjective memory complaints across three groups of older adults once they controlled for age. The research regarding the nature of memory self-efficacy and subjective memory complaints in first-degree relatives thus remains inconclusive.

Although many studies have looked at depression, dementia worry, and subjective memory in either care providers or first-degree family members of patients with dementia, no research to date has combined all of these into a single study conducted with a population that includes both of these groups of older adults. As such, the current study seeks to further elucidate the ways in which depression and dementia worry affect subjective memory and to determine whether these relationships differ for care providers versus for first-degree relatives of patients with dementia. We anticipate that depressive affect will be a stronger predictor of subjective memory in care providers than in first-degree relatives whereas dementia worry will be a stronger predictor of subjective memory in first-degree relatives than in care providers. Additionally, we hypothesize that the relationships between subjective memory and both depression and dementia worry will be strongest for individuals who are both first-degree family members and care providers of individuals diagnosed with dementia.

Method

Participants

Participants included 55 adults (77.8% female; 87% White) aged 55 and older ($M = 63.5, SD = 5.40$) who were first-degree relatives (i.e., parent, child, or sibling) of patients with diagnosed dementia, care providers for patients with dementia, or both first-degree relatives of and care providers for patients with dementia. All participants provided informed consent before beginning the study. Eleven (11) participants were care providers, 23 were first-degree family members, and 21 were both. The three groups were statistically equivalent in race ($\chi^2 (n=55) = 4.94, p = .55$) and gender ($\chi^2 (n=55) = 0.43, p = .81$) distributions and in years of formal education ($F(2, 52) = 0.31, p = .73$). (See Table 1.) Average age across groups differed significantly ($F(2, 52) = 3.40, p = .04$), however, with those who were both care providers and first-degree relatives being significantly younger than those who were exclusively care providers, $p = .02$. 
Table 1. Mean (SD) and Proportion Sociodemographic Characteristics of Participants

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>Age</th>
<th>% White</th>
<th>% Female</th>
<th>Years of education</th>
</tr>
</thead>
<tbody>
<tr>
<td>All participants</td>
<td>55</td>
<td>63.308</td>
<td>87.00</td>
<td>77.80</td>
<td>15.89 (2.32)</td>
</tr>
<tr>
<td>First-degree</td>
<td>23</td>
<td>64.09</td>
<td>86.96</td>
<td>73.91</td>
<td>16.13 (2.26)</td>
</tr>
<tr>
<td>relatives</td>
<td></td>
<td>(4.45)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Care providers</td>
<td>11</td>
<td>66.00</td>
<td>100</td>
<td>81.81</td>
<td>15.45 (2.42)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(7.36)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both</td>
<td>21</td>
<td>61.24</td>
<td>80.00</td>
<td>80.00</td>
<td>15.85 (2.41)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(4.60)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: No significant differences emerged between participant groups in terms of education, race, or gender. Those who were care providers alone were significantly older than those who were classified as both, \( F(2, 52) = 3.40, p = .04 \).

Materials

*Fear of Alzheimer’s Disease Scale (FoADS; French et al., 2011; Rahman 2016).*

This 30-item questionnaire measured the amount of concern participants have related to developing dementia. Some example items include “When I forget something, I am apt to think that I am getting Alzheimer’s disease”; “When I misplace things, I sometimes think that I may have Alzheimer’s disease”; and “I fear not recognizing family members.” Participants rated each item on a five-point Likert-type scale (1 = never to 5 = always). Possible scores ranged from 0 to 150, with higher scores signifying higher dementia worry.

*Personal Beliefs about Memory Instrument (PBMI; Lineweaver & Hertzog, 1998)*

This questionnaire measured three components of subjective memory: memory self-efficacy, change in memory over time, and perceived control over memory. Three items measured global memory self-efficacy. One example asked participants to compare their own memory to the memory of their same-aged peers. Additionally, an 8-item retrospective change subscale asked participants to compare their memory now to their memory 10 years ago and to their memory when they were 18 years old. Next, two 4-item subscales measured the amount of control that participants believed they exert over their current and future memory functioning.
The final 24-item subscale asked participants to rate their specific memory self-efficacy—that is, their ability to remember certain types of information (e.g., trivia, appointments, words in conversation, faces) on a scale from 1 (very poor) to 5 (very good). Across those subscales, higher scores reflected better memory self-efficacy, as well as beliefs in less retrospective change and higher levels of control over memory now and in the future.

*Center for Epidemiological Studies-Depression (CES-D; French et al., 2011)*

This questionnaire contained 20-items that measured depressive affect. Participants rated how often they had experienced symptoms associated with depression in the past week. Example items included “I did not feel like eating; my appetite was poor,” “I felt that I could not shake off the blues even with help from my family or friends, and “I felt that everything I did was an effort.” Participants responded to each statement on a four-point Likert-type scale from 0 to 3 (0 = Rarely or None of the Time to 3 = Most or Almost All the Time). Total scores ranged from 0 to 60, with higher scores indicating greater depressive symptoms.

*Demographic Questionnaire*

A demographic questionnaire created for the purposes of this study asked participants to report their race, age, gender, years of formal education, and relationships shared with people with dementia.

*Procedure*

This study was conducted through an online survey created on Qualtrics. Each participant completed a series of questionnaires related to subjective memory, dementia worry, and depressive affect. Participants were recruited into this study through Mechanical Turk, an online recruitment platform on which participation in scientific studies is incentivized through Amazon credits. A large group of adults on the platform who were aged 55 and over completed an initial screening that included only the demographic questionnaire. These participants received 25 cents in pay. Those who were care providers and/or first-degree relatives then received an invitation to complete the full study for $5 in Amazon credit. Another method of recruitment was through personal connections and local care provider networks. Care providers were e-mailed a flier listing the study criteria and instructions on how to access and complete the study. Upon completing the survey, all participants e-mailed the researcher a code that appeared after the final question. Payment via a $5 Amazon eGift card was sent in response to e-mails that included the correct survey code.
Results

Group Averages Across Subjective Memory, Depression, and Fear of Alzheimer’s Disease

The average score for the three PBMI subscales, the CES-D, and the FoADS are illustrated in Figures 1, 2, and 3. The three groups were statistically equivalent in their self-reported memory self-efficacy ($F(2, 52) = 0.53, p = .59$), self-reported memory change ($F(2, 52) = 0.72, p = .49$), and self-perceptions of memory control ($F(2, 52) = 0.34, p = .71$) on the PBMI. The three groups were also statistically equivalent in their depression scores ($F(2, 52) = 1.19, p = .31$) and fear of dementia ($F(2, 52) = 2.30, p = .11$).

Figure 1. PBMI Means Across Groups

Note: The three groups did not differ significantly in their memory self-efficacy ($F(2, 52) = 0.53, p = .59$), self-perceived change in memory ($F(2, 52) = 0.72, p = .49$), or control beliefs ($F(2, 52) = 0.34, p = .71$). PBMI = Personal Beliefs about Memory Instrument; MSE = Memory Self-Efficacy.
Figure 2. CES-D Means Across Groups

Note: The three groups did not differ significantly in their depression scores, $F(2, 52) = 1.19$, $p = .31$. CES-D = Center for Epidemiologic Studies-Depression Scale.

Figure 3. FoADS Means Across Groups

Note: The three groups did not differ significantly in their fear of dementia scores, $F(2, 52) = 2.30$, $p = .11$. FoADS = Fear of Alzheimer’s Disease Scale.
Correlations Between Subjective Memory, Fear of Alzheimer’s Disease, and Depression

Standard correlation analyses explored the relationships between depression, fear of dementia, and subjective memory (memory self-efficacy, change in memory over time, and perceived control over one’s memory) in the full sample as well as in each of the subgroups of participants (Table 2).

Table 2. Correlations Between Subjective Memory, Depression, and Fear of Alzheimer’s Disease

<table>
<thead>
<tr>
<th></th>
<th>PBMI change</th>
<th>PBMI control</th>
<th>CES-D total</th>
<th>FoADS total</th>
</tr>
</thead>
<tbody>
<tr>
<td>First-degree relatives (n = 23)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PBMI MSE</td>
<td>.504*</td>
<td>.638**</td>
<td>-.341</td>
<td>-.200</td>
</tr>
<tr>
<td>PBMI change</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>484*</td>
<td>-.048</td>
<td>-.298</td>
<td></td>
</tr>
<tr>
<td>PBMI control</td>
<td></td>
<td></td>
<td>-.360</td>
<td>-.388</td>
</tr>
<tr>
<td>CES-D total</td>
<td></td>
<td></td>
<td></td>
<td>.635**</td>
</tr>
<tr>
<td>Care providers (n = 11)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PBMI MSE</td>
<td>.899**</td>
<td>.666*</td>
<td>-.563</td>
<td>-.338</td>
</tr>
<tr>
<td>PBMI change</td>
<td></td>
<td></td>
<td>-.553</td>
<td>-.290</td>
</tr>
<tr>
<td></td>
<td>.613*</td>
<td>-.787**</td>
<td></td>
<td>-.389</td>
</tr>
<tr>
<td>PBMI control</td>
<td>-.787**</td>
<td>.608*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Care providers (n = 11)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both (n = 21)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PBMI MSE</td>
<td>.695**</td>
<td>.717**</td>
<td>-.490*</td>
<td>-.104</td>
</tr>
<tr>
<td>PBMI change</td>
<td></td>
<td></td>
<td>-.301</td>
<td>-.393</td>
</tr>
<tr>
<td></td>
<td>.578**</td>
<td>-.458*</td>
<td></td>
<td>-.194</td>
</tr>
<tr>
<td>PBMI control</td>
<td>-.458*</td>
<td>.011</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CES-D total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All participants (n = 55)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PBMI MSE</td>
<td>.641**</td>
<td>.666**</td>
<td>-.437**</td>
<td>-.180</td>
</tr>
<tr>
<td>PBMI change</td>
<td>.547**</td>
<td>-.270*</td>
<td>-.355**</td>
<td></td>
</tr>
</tbody>
</table>
PBMI control  
-0.473**  
-0.306*

CES-D total  
0.346**

Note: PBMI = Personal Beliefs about Memory Instrument; MSE = Memory Self-Efficacy; CES-D = Center for Epidemiological Studies-Depression Scale; FoADS = Fear of Alzheimer’s Disease Scale.

* Correlation is significant at the 0.05 level (two-tailed). ** Correlation is significant at the 0.01 level (two-tailed).

In the full sample, the three subjective memory measures from the PBMI were significantly related to one another, all $r_s \geq 0.547$, all $p < 0.01$. These relationships also reached significance for each of the three subgroups, all $r_s \geq 0.484$, all $p < 0.05$.

When examining the relationship that memory self-efficacy shared with depression and fear of dementia, memory self-efficacy negatively correlated with depression in the overall sample, $r = -0.437$, $p < 0.01$; however, this relationship was significant only in the subgroup of participants who were both care providers and first-degree relatives, $r = -0.490$, $p < 0.01$. Fear of AD did not have a significant relationship with memory self-efficacy in any of the subgroups. Perceived change in memory negatively correlated with both depression ($r = -0.270$, $p < 0.05$) and fear of dementia ($r = -0.355$, $p < 0.01$) in the general sample; however, this relationship was not significant among any of the subgroups.

In the full sample, perceived control over memory negatively correlated with both depression ($r = -0.473$, $p < 0.01$) and fear of dementia ($r = -0.306$, $p < 0.05$). The negative correlation between perceived control over memory and depression was also present in care providers ($r = -0.787$, $p < 0.01$) and in participants with both genetic and caregiving relationships ($r = -0.458$, $p < 0.05$).

Increased fear of dementia significantly corresponded with higher depression scores in both first-degree relatives ($r = 0.635$, $p < 0.01$) and care providers ($r = 0.608$, $p < 0.05$). Because of the lack of significant relationship between these constructs among the subgroup who shared both types of relationships with dementia patients, the significant relationship in the full sample is not as strong as that seen among the other two subgroups ($r = 0.346$, $p < 0.01$), although it still reached statistical significance.

Predictors of Subjective Memory in Care Providers and/or First-Degree Relatives

To more directly address the primary hypothesis, we ran multilevel regression analyses that included depression, fear of AD, and group (dummy coded) as predictors in the first model and added the interaction between group and the other predictors in the second model. We examined these models for memory self-efficacy, perceptions of memory change, and perceived control over memory. Inconsistent with our hypothesis, none of the interaction effects reached statistical significance, and adding
the interaction effects resulted in decreased model fit. This result indicates that the relationships between depression, dementia worry, and subjective memory were similar regardless of group membership.

Several main effects did reach significance in the initial models of the multilevel analyses. These results are summarized in Table 3. First, the model that predicted memory self-efficacy was significant, $R^2 = .213, F(4, 50) = 3.38, p < .05$. CES-D scores were the only significant predictor of memory-self efficacy. The model that predicted self-reported change in memory over time neared but did not reach significance ($R^2 = .157, F(4, 50) = 2.33, p = .069$), with fear of AD being a statistically significant predictor. Finally, for self-perceived control over memory, the model was significant, $R^2 = .249, F(4, 50) = 4.14, p < .01$. Again, self-reported depression was the only significant predictor of memory-control beliefs.
Table 3. Summary of Regression Analysis Results Examining Relationships Among Self-Report Measures

<table>
<thead>
<tr>
<th>Outcome measure</th>
<th>CES-D $\beta$</th>
<th>CES-D $p$</th>
<th>FoADS $\beta$</th>
<th>FoADS $p$</th>
<th>Gp 1 vs. Gps 2 &amp; 3 $\beta$</th>
<th>Gp 1 vs. Gps 2 &amp; 3 $p$</th>
<th>Gp 2 vs. Gps 1 &amp; 3 $\beta$</th>
<th>Gp 2 vs. Gps 1 &amp; 3 $p$</th>
<th>$R^2$</th>
<th>$F$</th>
<th>df</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBMI MSE</td>
<td>-.434</td>
<td>.002</td>
<td>-.044</td>
<td>.749</td>
<td>.044</td>
<td>.762</td>
<td>-.120</td>
<td>.409</td>
<td>.21</td>
<td>3.3</td>
<td>4, 50</td>
<td>.016</td>
</tr>
<tr>
<td>PBMI change</td>
<td>-.163</td>
<td>.248</td>
<td>-.291</td>
<td>.046</td>
<td>-.025</td>
<td>.868</td>
<td>.067</td>
<td>.656</td>
<td>.15</td>
<td>2.3</td>
<td>4, 50</td>
<td>.069</td>
</tr>
<tr>
<td>PBMI control</td>
<td>-.421</td>
<td>.002</td>
<td>-.168</td>
<td>.217</td>
<td>-.046</td>
<td>.746</td>
<td>-.010</td>
<td>.945</td>
<td>.24</td>
<td>4.1</td>
<td>4, 50</td>
<td>.006</td>
</tr>
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</table>

*Note:* Significant predictors are shown in boldface. CES-D = Center for Epidemiological Studies-Depression Scale; FoADS = Fear of Alzheimer’s Disease Scale; Gp = group; Gps = groups; PBMI = Personal Beliefs about Memory Instrument; MSE = Memory Self-Efficacy.
Discussion

This study aimed to build upon the previous literature examining the constructs of depression, fear of dementia, and subjective memory in those who share a significant relationship with an individual with dementia, and then to determine if depression and fear of dementia had a different predictive relationship with subjective memory depending upon if the individual was a first-degree relative and/or a care provider. We hypothesized that depression would be a stronger predictor of subjective memory for care providers than for first-degree relatives whereas fear of dementia would be a stronger predictor for first-degree family members than for care providers. We also predicted that these two constructs would be equally strong predictors of subjective memory for individuals who were both first-degree relatives and care providers.

Before examining the relationships among the primary variables in this study, we compared the three groups on the outcome measures. When comparing all of the groups, we found that they were all similar in their depression, fear of AD, and subjective memory, which had not been anticipated. The lack of a significant difference in depression scores contrasts with the findings of Mausbach et al. (2013) and Wang et al. (2015), who found that depression was more prevalent among care providers than among older adults in the general population who may or may not have also been first-degree relatives. Additionally, the lack of a significant difference for fear of AD is inconsistent with the findings of Kessler et al. (2014), who reported that first-degree relatives have increased dementia worry when compared to older adults without this relationship; however, Rahman (2016) did not find a significant difference in dementia worry between those who were and were not first-degree relatives, indicating that there is literature supporting the lack of significance difference in the current study. Finally, for subjective memory, Tsai and colleagues (2006) documented that first-degree relatives had more subjective memory complaints than spouses; however, this was the only study of note to directly compare the level of any of the key constructs across care providers and first-degree relatives. Although the current study did not replicate these findings, some of these differences may have reached statistical significance with a larger sample, especially the levels of dementia worry and depression that were higher but not significantly so in the group of participants who were both first-degree relatives and care providers.

When directly examining our hypothesis regarding the patterns of relationships among these variables, our hypothesis was not strongly supported, as group did not interact with the other predictor variables when examining any of the subjective memory outcome measures. Instead, the regression analyses pointed to depression as the strongest predictor of subjective memory, regardless of group membership; however, the correlational analyses do provide limited support for our postulation that depression would be a more significant predictor of subjective
memory in care providers than in first-degree relatives, as depression was the only significant correlate related to subjective memory in either group. Increased depression scores were associated with lower self-perceptions of control over one’s memory in this subgroup. This is perhaps not surprising, given that in the literature, depression has been associated with a decreased sense of control (Bowen et al., 2018; Dellefield & McDougall, 1996). The current study expands these findings by relating them specifically to care providers of dementia patients.

In comparison, fear of AD did not correlate more strongly with subjective memory in the first-degree-relatives group than the care-provider group as we had predicted, as it was not significant in either analysis and the magnitudes of the correlations were highly similar. In the full sample, however, participants who reported greater dementia worry also perceived their memory to have changed more negatively and felt they had less control over their memory. The regression analysis also supported the significant correlation between perceived decline in memory and a concern about developing AD when all older adults in the sample were taken into account. These results support the findings of Bowen et al. (2018), who found a significant relationship between perceived memory decline and an increased fear of dementia in a sample of older adults. Because this study is correlational, it is impossible to know whether self-perceived decline in memory is fueling dementia worry or individuals with a greater fear of dementia are more sensitive to subtle changes in their memory across time. Future studies will be necessary to further examine the direction of this relationship.

Inconsistent with our third hypothesis, depression was the only significant correlate of subjective memory in the group of participants who were both family members and care providers. Similar to care providers, increased depression was related to less perceived control over memory. Additionally, increased depression also correlated with lower memory self-efficacy in this group. This supports the findings of decreased memory self-perceptions in depressed older adults according to Cipolli et al. (1996) and Dellefield and McDougall (1996). Many of these results were mirrored in the overall sample, where increased depression scores related to both lower memory self-efficacy and decreased control beliefs.

Although no connection existed between fear of AD and subjective memory, the correlational analyses revealed significant correlations between depression and fear of dementia, with the relationships reaching significance in the full sample, the care providers, and the first-degree relatives. This relationship raises the possibility that depression is a mediator between subjective memory and fear of dementia. More specifically, fear of dementia may lead to depression, which then influences subjective memory. The regression analyses may have allowed depression to emerge as a significant predictor but not fear of AD, because of potential shared variance between these two constructs. The sizeable but insignificant negative relationship between fear of AD and subjective memory lends support to this possibility. Although the
current study did not have enough power to adequately test this hypothesis, this relationship is one of interest for future studies with larger samples. Additionally, the current study examined only linear relationships among the variables. Future studies will be necessary to determine whether potential colinear or higher-order relationships exist between depression, fear of AD, and subjective memory in these three groups of older adults.

Limitations and Future Directions

Despite several significant results within our sample, an important limitation to recognize is the small sample size overall and particularly within each participant subgroup. This may influence the extent to which these results can be generalized to the larger population of care providers and/or first-degree relatives. With the care provider sample including only 11 individuals, the number of significant results discovered was surprising. Many recruitment strategies aimed at targeting more care providers ultimately resulted in an increase in the “Both” group because many known care providers had a family connection as well, even though that may not have been the individual they were caring for. Future studies should aim to gather a larger sample size overall and across each subgroup to determine the extent to which these findings apply to a broader population of care providers and/or first-degree relatives.

While the subgroups were not statistically different in race, gender, or years of education, the sample in this study is not representative of the overall population in these characteristics. The recruitment strategies used favored White, well-educated, and female participants in their early sixties. If socioeconomic background influences concerns regarding depression, dementia worry, and subjective memory, further examination of these constructs in a more diverse sample will better elucidate the nature of the relationship between these variables in care providers and/or first-degree relatives.

Last, the nature of the care-provider relationship that participants had with individuals with dementia was not broadly defined in the current study. The definition of care provider was not explained in detail, so it is likely that certain self-identified care providers were less involved than others. For example, some care providers in this study may not have been living with or providing daily care to the individual with dementia. Less-involved care providers could be less affected by this relationship and therefore have lesser depression, dementia worry, and subjective memory concerns than those who are more involved. Several studies have shown greater depressive affect, fear of dementia, and subjective memory concerns in older adults who share relationships with patients with dementia when compared to the average older adult (Hausmann et al., 2018; Kessler et al., 2014; Mausbach et al., 2013; Wang et al. 2015), but these studies set a minimum level of involvement (e.g., particular tasks the person had to perform or amount of time spent per week providing care) in the patients’ lives.
in order to participate. Further research could improve upon the present study by either requiring participants to be daily or residential care providers or by examining if the extent of the relationship has an impact upon their depression, fear of dementia, and subjective memory.
References


