TAKING BACK THEIR FACES:

THE DAMAGES OF NON-CONSENSUAL DEEPFAKE PORNOGRAPHY ON FEMALE

JOURNALISTS

by

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ABSTRACT

This thesis serves to provide a review of what we currently know about non-consensual deepfake pornography and how it objectifies and inflicts damage onto female journalists throughout the world. These deepfakes involve taking images of private individuals' faces - often female journalists - and placing them on pornographic videos and images. It will look closely at two cases: Indian journalist Rana Ayyub, who was bombarded with deepfake pornography of herself for standing up for a victim of child-rape, as well as Australian feminist and activist Noelle Martin, who found thousands of images and videos of herself committing sexual acts which were uploaded by perpetrators that aimed to ruin her reputation. This thesis examines the ramifications of said deepfakes and what effect they have on the women that experience them first-hand through the lens of Fredrickson and Robert's sexual objectification theory. Although deepfake pornography continues to exist in a system that regularly diminishes women's self-worth, several steps are being taken across the globe by both journalists and governments alike in order to combat and prevent women's bodies from being attacked and harassed online. Ultimately, this thesis concludes that the presence of non-consensual deepfake pornography ultimately negatively affects the ways in which female journalists and women alike are treated and depicted on the internet.

INTRODUCTION

We live in a world where we can watch videos of activists delivering inspiring speeches, nature documentaries can fill us with happiness and hope for the future, and our favorite shows can take us away from the world, if just for a minute. What if you were told that all of those videos you've seen aren't real? What if it were impossible to decipher truth from manipulation when watching a video on the internet? With the recent rise of deepfakes, a new technology that enables anyone to create synthetic videos that very closely resemble authentic videos, the consequences would be disastrous.

Although the world is constantly shifting and there is more fake news and disinformation now than ever, we always have a tendency to believe that video will remain true and constant. Studies even show that internet users place a significant amount of trust in visual content.[1] This means that above all else, video is one form of media that we all seem to dismiss as being truthful, regardless if it is truthful or not. In terms of deepfakes, a new technology that uses artificial intelligence to digitally alter a person so that they appear to be someone else, there have been numerous studies on people's ability to detect this technology, and the results seem to be in favor of deception. In a study conducted by Cristian Vaccari and Andrew Chadwick[2] participants were shown an altered video of Barack Obama calling Donald Trump a "dipshit." According to the study, 16.9% of participants were deceived, while 27.5% were uncertain of whether or not they were deceived. Although 55.6% of participants were not at all deceived by the video, the alarming rate at which roughly 45% of people either cannot detect deception or are confused by whether it occurred or not, is grounds for concern.

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[1] Mayr, Eva, et al. "Trust in Information Visualization." *Danube University Krems*, 2019, doi.org/10.2312/trvis.20191187.

[2] Chadwick, Andrew, and Vaccari, Cristian. "Deepfakes and Disinformation: Exploring the Impact of Synthetic Political Video on Deception, Uncertainty, and Trust in News." *Social Media +Society*, 2020, https://doi.org/10.1177/2056305120903408

To put this in context, this becomes extremely alarming when we take deepfake pornography into account. Every internet user today has the ability to upload millions of photos of themselves to the internet. These pictures don't have to be sexually explicit in nature, but when placed in the wrong hands, regular images can be used to create deepfake pornography that can damage someone's reputation forever, both on the internet and in the material world. Multiple studies have shown that non-consensual deepfake pornography utilizes all eight tactics the Power and Control Wheel, a process that explicitly identifies types of relationship abuse.[3] It is also becoming easier through technology and apps like FaceApp, an app in which users can replace any face with another, which make it easier for essentially everyone on planet earth to use face swapping technology easily and without needing any existing knowledge. All users need to create deepfake pornography videos are a good graphics processing unit along with CUDA support used to speed up compute-intensive applications.[4] Essentially, anyone can take several pictures of any woman from their Facebook, Instagram, and other social profiles and create deepfake pornography without their consent, which has proven to be extremely dangerous.[5]

According to the Organization for Security and Co-operation in Europe, female journalists are more than three times as likely to receive hate comments and abuse than their male counterparts.[6] This makes them a more likely target for digital sexual assault like deepfake pornography. Seemingly popping up again and again, deepfake pornography is being used to target female journalists and activists to question their integrity and dismiss their work. In the case of journalist Rana Ayyub, an Indian woman who spoke out against the Indian government's

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[3] Maddocks, Sophie. "'A Deepfake Porn Plot Intended to Silence Me': exploring continuities between pornographic and 'political' deep fakes," *Porn Studies*, 7:4, 415-423, 2020. DOI: 10.1080/23268743.2020.1757499

[4] Cole, Samantha. "We Are Truly Fucked: Everyone Is Making AI-Generated Fake Porn Now." *VICE*, Motherboard, 2018, www.vice.com/en/article/bjye8a/reddit-fake-porn-app-daisy-ridley.

[5] Fitzgerald, Ali. "Our Deepfake Future." *Virginia Quarterly Review* 96 (1): 8–13, 2020.

[6] OSCE. "Digital Threats Targeting Female Journalists." *OSCE, Representative on Freedom of the Media,* 2015, www.osce.org/fom/179486.

response to the rape of an eight-year-old Indian girl[7], one party was so set on silencing her

advocation for a rape survivor that they responded by creating a deepfake of Ayyub that

circulated around WhatsApp to over thousands of users in India. To the east in Australia, activist

Noelle Martin discovered that images of herself were being photoshopped onto images and

videos of porn actresses by anonymous sexual predators.[8] These findings are very telling of how

little power women hold over their own bodies and how female journalists are constantly being

attacked for using their voices to speak out against issues pertinent to society's well-being.

But how does the creation of these deepfakes negatively impact women's roles in society

as a whole? We all know that the objectification of women isn't a new idea. Various movements

such as the #MeToo movement[9] in recent years, the Women's March in 2017, even the women's

liberation movement in 1960 have all confirmed just how much women and their bodies are

constantly scrutinized. The creation of non-consensual deepfake pornography is simply another

new technology on the rise being used to objectify women and damage their reputations in order

to silence them. More and more women, especially female journalists, are objectified into

silence. These deepfakes are the new weapon being used by internet users in order to prevent

women from speaking their minds on issues like feminism and equal rights. This thesis will work

to highlight female journalists and understand just how deepfakes affect their mental wellness, as

well as objectify them and remove their ability to reach self-actualization.

According to feminist writer Sandra Bartky, "objectification occurs when a woman's

body part is separated from her as a person and viewed as a mere instrument or regarded as these

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[7] India Today Web Desk. "I Was Vomiting: Journalist Rana Ayyub Reveals Horrifying Account of Deepfake Porn Plot." *Thomson Press*, 2018, www.indiatoday.in/trending-news/story/journalist-rana-ayyub-deepfake-porn-1393423-2018-11-21.

[8] "Noelle Martin." *Forbes*. Accessed May 1, 2021. https://www.forbes.com/profile/noelle-martin/.

[9] #MeTooMovement. *Me Too. Movement*, 14 Apr. 2021, metoomvmt.org/.

instruments were capable of representing her."[10] Furthermore, Barbara Fredrickson and Tomi-Ann Roberts, two leading feminist thinkers and professors at Stanford University created a framework for sexual objectification in 1997. According to Fredrickson and Roberts, there are three related arenas when discussing objectification theory. Firstly, objectification can be seen playing out in the real world, that is, in interpersonal and social encounters. The second arena focuses on the negative depiction of women in visual media and advertisements. The third and possibly most important arena in this case, is evidence that women's bodies are sexualized and reduced to objectivity in visual media such as film, digital arts, music, and video.[11]

Essentially, case number three is what deepfake pornography is: women's bodies being separated from themselves and regarded as an object of desire. This becomes even more damaging however, when revenge porn is taken into account. In this way, deepfakes are used for both objectification and to damage reputations. Here, females' bodies are being used as a tool or object in order to guarantee a certain outcome. In this case, the desired outcome for deepfake producers is to silence the women whose bodies they are manipulating. This thesis asks and will attempt to answer the following question: How does the creation of deepfake pornography further the objectification and damage the reputation of adult women on the internet?

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[10] Bartky Lee, Sandra. *Femininity and Domination: Studies in the Phenomenology of Oppression.* Routledge, 1990.
[11] Fredrickson, Barbara & Roberts, Tomi-Ann. "Objectification Theory: Toward Understanding Women's Lived Experiences and Mental Health Risks." *Psychology of Women Quarterly,* 1997. 21. 173-206. 10.1111/j.1471-6402.1997.tb00108.x. p. 176

LITERATURE REVIEW

Obtaining its name on Reddit by the user "u/deepfake," the word deepfake can be broken down into two separate parts. Deep, or "deep learning" is defined as computers taking advantage of data in order to develop appropriate features or complete certain tasks.[12] Fakes, the second phrase, simply means that it is designed to trick the consumer. Through the use of deep learning, Reddit user "u/deepfakes" was able to create technology in which he placed various celebrities' faces onto clips of pornography.[13] This user, who went on to share their technology with other Reddit users, created a cascade of hundreds and thousands of users generating fake content, thus birthing the term "deepfakes."

Deep learning itself is the process of a computer learning and identifying patterns through repetition, thus generating new meaning from these patterns. Essentially, deep learning and creating deepfakes occurs when two images are given to a computer - for example, a journalist's and pornstar's face - and the computer is able to create a 3D, moving picture of both pictures that are able to interact simultaneously with one another. By also mapping characteristics between the faces of these two images, the computer is able to create a realistic looking deepfake that can easily trick the eye of the viewer. Over time, the computer is then able to process these images without the aid of a human to enforce the steps, thus making it so the computer must learn from itself and the images are perfectly tailored to each other.[14]

After perfecting this task, the computer can then recreate faces of people that look bizarrely similar to the original picture. According to a Travis Wagner, who studies deepfakes in

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[12] Socher, Richard, et al. "Deep Learning for NLP (without Magic)." *ACM Digital Library*, Tutorial Abstracts of ACL 2012, 2012, dl.acm.org/doi/10.5555/2390500.2390505.

[13] Heller, Martin. "What Are Deepfakes? AI That Deceives." *InfoWorld*, 15 Sept. 2020, www.infoworld.com/article/3574949/what-are-deepfakes-ai-that-deceives.html.

[14] Wagner, Travis L., and Ashley Blewer. "'The Word Real Is No Longer Real': Deepfakes, Gender, and the Challenges of AI-Altered Video." *Open Information Science* 3 (1): 32–46, 2019. https://doi.org/10.1515/opis-2019-0003.

depth as they relate to the portrayal of gender and stereotypes, "the computer is then able to take individual frames from a video and map the expression of a person's face in the video to the computer-generated replication of the generated model of a person's face matching that expression, ostensibly swapping in the new computer-generated image for each frame."[15] Essentially, the new, altered video can be made to look completely authentic.

Although seemingly harmless, many scholars have found that deepfakes have significant damage on the public's ability to decipher real from fake. The previously mentioned study conducted by Cristian Vaccari and Andrew Chadwick[16] indicates that producers of deepfake content are on the way to completely deceiving the public. To put this in context, humans are inherently programmed to trust visual media. According to Eva Myr, et al., it has been determined that internet users, through using their own understanding and judgement, should be able to decipher what is authentic and what is being fed to them. Countering this, people who are more likely to seek truth in videos shown to them are more likely to believe any visual information they are given.[17] This means that humans have been trained to have inherent trust in visual information, regardless if that information is true.

While a lot of the panic surrounding deepfakes revolves around political misinformation and dangers regarding world safety, the majority of deepfakes are of women. According to a study conducted by Sensity AI, between 90% and 95% of deepfakes are pornographic in nature.[18] With the help of studies like this, scholars have concluded that deepfake pornography is inherently non-consensual and emphasize the importance of online consent and laws regarding pornographic deepfakes. According to pornography studies scholar Emily Van der Nagel,

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[15] Wagner, Travis L., and Ashley Blewer, "The Word Real Is No Longer Real", 36.
[16] Chadwick, Andrew, and Vaccari, Cristian, "Deepfakes and Disinformation".
[17] Mayr, Eva, et al, "Trust in Information Visualization".
[18] "How to Detect a Deepfake Online with No Coding Skills." 2021. *Sensity*. February 8, 2021. https://sensity.ai/how-to-detect-a-deepfake/.

deepfakes are a product of misogyny and are created as a way to control women's images. Van der Nagel emphasizes that although there are laws protecting privacy, these laws have not been able to stop men from being able to manipulate and interfere with the images of women.[19]

Furthermore, law scholar Rebecca Delfino illustrates the urgency for litigation surrounding pornographic deepfakes. Delfino emphasizes that victims of non-consensual pornography often "suffer serious emotional and psychological harms and can fear for their physical safety"[20], and that "most nonconsensual pornography disproportionately victimizes women and girls."[21] Delfino offers multiple solutions in order to combat non-consensual deepfake pornography, including criminalizing them at a federal level, as well as creating awareness, education, and training on the public's behalf through public service announcements and social media[22], thus facilitating open discussion in an aim to eradicate the impending demand for deepfake pornography. It is with these sources that we are able to take a closer look at how deepfake pornography furthers the objectification of women in our society.

In her book *Feminine Psychology,* German psychoanalyst Karen Horney was the first to illustrate how the objectification and fetishization of women's bodies was the result of the damages that society and culture brought upon them. Horney, often coined as the founder of modern feminism[23], demonstrated that society created the modern woman to be an object of desire, which ultimately negatively affected her ability to reach self-actualization and achieve her

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[19] Van der Nagel, Emily. "Verifying images: deepfakes, control, and consent," *Porn Studies*, 7:4, 424-429, 2020. DOI: 10.1080/23268743.2020.1741434

[20] Delfino, Rebecca. "Pornographic Deepfakes: The Case for Federal Criminalization of Revenge Porn's Next Tragic Act." *SSRN*, Accessed April 19, 2021. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3341593, 928.

[21] Delfino, Rebecca. "Pornographic Deepfakes", 928.

[22] Delfino, Rebecca. "Pornographic Deepfakes", 933.

[23] Garrison, Dee. "Karen Horney and Feminism." *Signs: Journal of Women in Culture and Society*, 2015. https://doi.org/10.1086/493840.

full human potential.[24] This groundwork accomplished by Horney truly paved the way for other scholars to understand feminine psychology and feminism as a whole.

One specific theory that emerged from the late 1990's with the help of Karen Horney's research is the theory of female objectification. This theory, in which many feminist scholars have researched in detail and added significant value to, is one that is highly regarded in the modern feminist sphere. Essentially, objectification theory seeks to prove Karen Horney's point that our society deems it so that "it is the socially sanctioned right of all males to sexualize all females, regardless of age or status."[25] At its core are two prominent feminist thinkers: Barbara Fredrickson and Tomi-Ann Roberts. Both professors at Stanford University, Fredrickson and Roberts created much of the framework for sexual objectification in 1997.[26] In their research, they essentially laid out the groundwork for their theory in three different spheres. In accordance with deepfakes and as stated previously, their third sphere is what will be focused on in depth.

In the first arena, objectification can be seen playing out in the real world, that is, in interpersonal and social encounters.[27] This can be seen with concepts such as the "male gaze,"[28] in which it is seemingly more appropriate and accepted for men to gaze at women in both social situations and through digital mediums, especially in cases involving sex or women's bodies. We also see this form of objectification in cases involving violence and abuse. Author Brian Van Brut also discusses this concept in depth, specifically as it relates to gender-based violence. Van Brut explains that many male perpetrators of violence often assume costumes or dress themselves in certain attitudes and thoughts in order to prepare for said violence they are

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[24] Westkott, Marcia. "The Feminist Legacy of Karen Horney", *Yale University Press*, 1988. .http://archive.org/details/feministlegacyof00west_0.
[25] Westkott, Marcia. "Historical and Developmental Roots of Female Dependency".
[26] Fredrickson, Barbara & Roberts, Tomi-Ann, "Objectification Theory".
[27] Fredrickson, Barbara & Roberts, Tomi-Ann, "Objectification Theory", 176.
[28] Hall JA, Friedman GB. "Status, Gender, and Nonverbal Behavior: A Study of Structured Interactions between Employees of a Company." *Personality and Social Psychology Bulletin*. 1999. doi:10.1177/01461672992512002

preparing to commit. Through this concept of "dressing up," perpetrators are able to

depersonalize and objectify their victims.[29] This is most evident when we see male perpetrators

committing sexual violence and harassment. In countless cases, perpetrators use sexual violence

to incite the threat of violence, control, and ultimately humiliate the victim.[30] Sexual violence

does not simply give some sort of sexual gratification to these perpetrators, it makes them feel as

though they have complete domination over their victim and can control both their mind and

body.

      The second arena focuses on visual media and advertisements specifically how they

relate to objectification. This theory seeks to understand how advertisements and pieces of

persuasive media ultimately portray women's bodies as something to be looked at as objects of

sexual desire. Studies have shown that in many advertisements, men are seen blatantly staring at

women far more than women are seen staring at their male counterparts.[31] This causes some

males to associate feminine sexuality with objectification, thus posing women as "the other,"

which in many cases, victimizes her. According to gender studies scholar Stankiewicz,

> It is apparent that the link of sexuality and victimization in advertising affects the male
>
> psyche by causing them to heedlessly become 'desensitized' to the synthesis of sex and
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> violence. Desensitization to violence against women has become so common in western
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> societies that one in four women have become victims of rape or attempted rape, and
>
> many college girls have experienced sexual discrimination.[32]

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[29] Van Brut, Brian. *Understanding the Role of Objectification and Misogyny in Aggression and Violence*. 32nd Annual Winter Roundtable on Cultural Psychology and Education. Alexandria, VA: Microtraining Associates, 2015.

[30] Ward, Colleen A., and Fathiah Inserto. *Victims of sexual violence: A handbook for helpers*. NUS Press, 1990.

[31] Signoretti, Nicoletta. "A Study of Gender Advertisements. A Statistical Measuring of the Prevalence of Genders' Patterns in the Images of Print Advertisements". *Proceedings*. 1. 947, 2017. 10.3390/proceedings1090947.

[32] Stankiewicz, Julie M., and Francine Rosselli. 2008. "Women as Sex Objects and Victims in Print Advertisements." *Sex Roles* 58 (7): 579–89. https://doi.org/10.1007/s11199-007-9359-1.

In other words, the sexual portrayal of women in advertisements can potentially cause men to be desensitized to sex and violence when combined. This desensitization makes it easier for some men to associate the two concepts in their minds. Although most men do not act with violence in accordance with these associations, a number of studies have shown that men have resorted to violence when dealing with conflicting sexual imagery.[33]

The third and last arena, and possibly the most relevant when discussing deepfake pornography, is when the objectifying gaze involves visual media.[34] This can involve music videos, films, television shows, commercials, and most important in the context of this thesis, pornography. Objectification can occur through how a woman is depicted in these forms of visual communication. These depictions often play a major role in shaping both men and women's attitudes and feelings towards viewing women. In his book titled *Ways of Seeing,* author John Berger argues that visual consumption from a historical concept ultimately reifies the masculine role of looking or observing and obtaining the object - in this case, the female - of which they are looking.[35]

Increasingly abundant in American culture, depictions of women in compromising situations is forced to become the norm. Fredrickson and Roberts state that it is the mass media's job today to "dismember women, eliminating their heads altogether, focusing exclusively on their bodies or body parts."[36] In other words, women's identities are being ripped away from them and ultimately replaced with an identity that revolves around sex and sexual desire. Studies show too, that women of color are far more objectified and fetishized in popular culture. Multiple studies have shown that women of color, specifically Black women, are portrayed in

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[33] Henry, Nicola, and Anastasia Powell. "Beyond the 'Sext': Technology-Facilitated Sexual Violence and Harassment against Adult Women." *Australian & New Zealand Journal of Criminology* 48 (1): 104–18, 2015.
[34] Fredrickson, Barbara & Roberts, Tomi-Ann, "Objectification Theory", 176.
[35] Berger, John. *Ways of Seeing.* Penguin Modern Classics, 2008.
[36] Fredrickson, Barbara & Roberts, Tomi-Ann, "Objectification Theory", 177.

print media with the least amount of facial prominence, that is, that their bodies are depicted as the centerpiece.[37] This proves that objectification can be damaging not only towards women explicitly, but can also fuel racism and intolerance, furthering separation between races. Ultimately, women's bodies are in a constant state of scrutinization, which has a fundamental effect on how they are portrayed in both real-world instances and through online, visual communication.

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[37] Zuckerman M, Li C, Diener EF. "Societal Conditions and the Gender Difference in Well-Being: Testing a Three-Stage Model." *Pers Soc Psychol Bull,* 2017. doi: 10.1177/0146167216684133

METHODOLOGY

In my research I began with researching deepfakes and the potential harm that they have to society in general from a propaganda standpoint. Firstly, I looked at Cristian Vaccari and Andrew Chadwick's article, "Deepfakes and Disinformation: Exploring the Impact of Synthetic Political Video on Deception, Uncertainty, and Trust in News". Here, Chadwick and Vaccari highlight the importance of understanding how to combat disinformation in this increasingly distrustful socio-cultural climate. They discuss the main elements of artificial intelligence and how deepfakes are created. This was one of the first sources that formulated my thoughts about deepfakes and their potential harm to society. From here, I understood that I wanted to discuss deepfakes in detail, but I had not developed a narrow focus yet.

At a turning point during my research, I came across Sophie Maddock's work. In her study, Maddocks introduces deepfake pornography and provides definitions, examples, and ways to fix deepfake pornography itself. She argues that this new form of fake porn has actually been in existence for several years in different forms. She identifies two forms of non-consensual fake porn: non-consensual deepfakes themselves, as well as image-based non-consensual porn. In my thesis, I use Maddock's example of non-consensual pornography: journalist Rana Ayyub, who explains how she experienced digital abuse through deepfake porn of herself surfacing on the internet. Through Maddock's article, I was able to collect information regarding Rana Ayyub and her experience with deepfakes. I collected articles from news organizations such as The

Washington Post[38], India Today[39], and The Huffington Post[40], which all discussed Rana Ayyub and online harassment she received due to a deepfake that was created of her.

From here, I discovered Noelle Martin, another journalist who had experienced deepfake pornography. I discovered Martin's story while I was reading about Ayyub, through a TED Talk that she conducted in Perth, Australia.[41] Here, she highlights what happened to her and how perpetrators objectified her and made her feel insecure and unable to retaliate. Through gathering more information about Martin through ABC News AU[42] and Technology Review[43], I was then able to conclude that these were not isolated incidents and that they both had something similar in common: in both instances, the perpetrators and creators of the deepfakes seemed to have a focus on silencing female journalists who spoke out against controversial topics, as well as objectifying them and using their bodies -- or in this case, faces -- in order to scare them back into silence.

I then came up with my research question which aims to ask: How does the creation of deepfake pornography further the objectification and damage the reputation of adult women on the internet? Essentially, this question asks whether or not these deepfake pornographic attacks

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[38] Jankowitz, Nina. "The Threat from Deepfakes Isn't Hypothetical. Women Feel It Every Day." *The Washington Post,* 2021.

[39] Ayyub, Rana. "I Was Vomiting: Journalist Rana Ayyub Reveals Horrifying Account of Deepfake Porn Plot." *India Today,* May 19, 2021. https://www.indiatoday.in/trending-news/story/journalist-rana-ayyub-deepfake-porn-1393423-2018-11-21.

[40] Ayyub, Rana. "I Was The Victim Of A Deepfake Porn Plot Intended To Silence Me." *HuffPost UK*, 21 Nov. 2018, www.huffingtonpost.co.uk/entry/deepfake-porn_uk_5bf2c126e4b0f32bd58ba316.

[41] Martin, Noelle. *Online Predators Spread Fake Porn of Me. Here's How I Fought Back. TED*, 2017, www.ted.com/talks/noelle_martin_online_predators_spread_fake_porn_of_me_here_s_how_i_fought_back#t-285570.

[42] Melville, Kirsti. The Insidious Rise of Deepfake Porn Videos — and One Woman Who Won't Be Silenced - ABC News." n.d. Accessed May 19, 2021. https://www.abc.net.au/news/2019-08-30/deepfake-revenge-porn-noelle-martin-story-of-image-based-abuse/11437774.

[43] Hao, Karen. "Deepfake Porn Is Ruining Women's Lives. Now the Law May Finally Ban It." n.d. *MIT Technology Review.* Accessed May 19, 2021. https://www.technologyreview.com/2021/02/12/1018222/deepfake-revenge-porn-coming-ban/.

are a result of women portrayed negatively on the internet and how deepfakes aim to silence women and further objectify them. To answer these research questions, I conducted a study of journalists Rana Ayyub and Noelle Martin, two leading activists on social and political change who experienced deepfake pornography harassment.

This study was conducted through the lens of Fredrickson and Roberts' objectification theory. I use this framework to understand how non-consensual deepfake porn affects women in both the digital and physical world. These experiences are seen through three different frameworks: human-to-human interaction, interaction with the media, and portrayal in the media, as discussed prior. To understand how deepfakes truly affect female journalists and women as a whole, this article makes it more digestible and offers a lot of insight into the realms of objectification.

In accordance with this article and theory, there are many other sources that I consulted which shared emphasis on objectification. Belinda Balraj's article "Understanding Objectification Theory", which examines objectification theory through information from scholars and gives a framework for readers to understand objectification through the eyes and voices of women in a sociocultural context. In a sense, the article examines how objectification theory is how the female body is objectified and is viewed separately from the rest of her identity.

Through more extensive research, I found different statistics across a wide range of websites indicating how common it is for women to be harassed on the internet. These statistics came from places such as International Center For Journalists[44], as well as several other articles and statistics providing information about the harassment of female journalists and women

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[44] Welle, Deutsche. "New Research: Online Attacks on Women Journalists Lead to 'Real World' Violence," *DW*, May 4, 2021. https://www.dw.com/en/new-research-online-attacks-on-women-journalists-lead-to-real-world-violence/a-55712872.

alike. It was these sources and articles that led me to conclude that objectification plays a huge

role in the production and consumption of pornographic deepfakes targeting female journalists.

ANALYSIS AND DISCUSSION

Digital media has been an increasingly important tool for journalists to use in the 21st century. Journalists everywhere use digital media and the internet to find sources for their stories, share their pieces, and engage with other journalists and their audiences.[45] However, it has become more difficult for female journalists to engage with their audiences in the last few years due to harassment and threats of violence towards them. Female journalists all over the world are experiencing rampant harassment in both the workplace and in public.[46] Various studies have shown and continue to show that female journalists are far more prone to online harassment than male journalists. [47]

It has also been determined by various scholars that most of these threats and harassments are sexual in nature or gender based.[48] Female journalists often get threats that are explicit in nature: threats of harassment, rape, and even murder. A new study conducted by the International Center for Journalists found that nearly 75% of female journalists have reported experiencing online abuse, threats, and attacks.[49] Often perpetrated by cisgender males towards cisgender females, many of these forms of harassment can even lead to offline, real-world attacks.[50]

Harassment towards female journalists can range from threatening comments to deadly real-life targeting. Real-world examples include Maltese journalist and anti-corruption activist Daphne Caruana Galizia, who was assassinated in Malta due to her passion for reporting the

[45] Koirala, Samiksha. "Female Journalists' Experience of Online Harassment: A Case Study of Nepal." *Media and Communication* 8, February, 2020, https://doi.org/10.17645/mac.v8i1.2541.

[46] Koirala, Samiksha, "Female Journalists' Experience of Online Harassment", 47.

[47] Sarah Hewitt, T. Tiropanis, and C. Bokhove. 2016. *The problem of identifying misogynist language on Twitter,* ACM Conference on Web Science. Association for Computing Machinery, New York, NY, USA, 333–335. DOI:https://doi.org/10.1145/2908131.2908183

[48] Edström, M. "The trolls disappear in the light: Swedish experience of sexualized hate speech in the aftermath of Behring Breivik." *International Journal for Crime, Justice, and Social Democracy,* 2016.

[49] Welle, Deutsche. "New Research: Online Attacks on Women Journalists Lead to 'Real World' Violence," *DW*. Accessed May 4, 2021.

[50] Wagner, Travis L., and Ashley Blewer, "'The Word Real Is No Longer Real".

misconduct of Maltese politicians. She had been publishing articles for decades despite constant death threats, lawsuits, and sexual harassment. In 2017, she published sensitive information regarding certain Maltese politicians' involvement in the Panama Papers, which is what ultimately led to her death.[51] Furthermore, Indian journalist Gauri Lankesh was harassed and eventually murdered for speaking out against right-wing Hindu extremism in Bangalore. Lankesh received several threats before her death, including threats from Hindu nationalist organizations.[52] In September of 2017, Lankesh was shot and killed by men now identified as the Satanan Sanstha, an extremist organization, when she was on her way home from work.

These parallels between online attacks and murders further the connection between them. Although these are only two stories of female journalists experiencing extreme harassment which led to murder, many female journalists experience this on a smaller scale every day. Not long ago in 2014 when online harassment was just beginning to grasp the attention of mainstream media, it was reported that nearly 23% of female journalists experienced "intimidation, threats, or abuse online in relation to their work."[53]

One of the reasons for the constant harassment of female journalists is what German psychoanalyst Karen Horney stated previously: that "it is the socially sanctioned right of all males to sexualize all females, regardless of age or status."[54] Paired with the damage that objectification does to both the minds of male perpetrators, as well as female bodies, this is a recipe for disaster. The concept of objectification of women's bodies allows for males to use her own sexuality and gender against her. Paired with issues like deepfake pornography, perpetrators

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[51] Garside, Juliette. "Malta car bomb kills Panama Papers journalist". *The Guardian*. Archived from the original on 20 October 2017. Retrieved 21 October 2017.
[52] Frontline Defenders. "India: Prominent Human Rights Journalist Gauri Lankesh Shot Dead." 2017. *Front Line Defenders.* September 7, 2017.
[53] Welle, Deutsche. "New Research: Online Attacks on Women Journalists Lead to 'Real World' Violence".
[54] Westkott, M, "Historical and Developmental Roots of Female Dependency".

creating this non-consensual pornographic content ultimately target female journalists to undermine women's truths and make them seem less credible.

A stark example of this form of harassment is investigative journalist and Washington Post columnist Rana Ayyub. In India in 2018, Ayyub, was putting together an investigative piece about an eight-year-old Kashmiri girl who had been raped by a prominent Indian politician. The nationalist party of India, Bharatiya Janata was on the side of the accused.[55] What happened soon after would ultimately change the course of her life forever. Ayyub had been subject to harassment before, as many female journalists have. She had received both death threats and rape threats, but something new had come her direction. In April of 2018, Ayyub was targeted in a deepfake pornography plot. This plot intended to force Ayyub into silence and condemn her for advocating against the nationalist party of India. Along with this deepfake pornography, photoshopped tweets began circulating that claimed to be her. With messages such as "I hate India," and "I love child rapists and if they are doing it in the name of Islam, I support them,"[56] Ayyub began to worry that her credibility was on the line. Frustrated with the bombardment of fake tweets, she eventually wrote a message clarifying that she was not the one tweeting these blasphemous tweets.

A few days after these tweets began to circulate, Ayyub was confronted with yet another form of digital harassment: pornographic deepfakes of herself. While sitting at a cafe with a friend, Ayyub was sent a short clip of her own face plastered onto the face of a porn star. Confused and hurt by the video, which she knew was obviously not her own body, Ayyub immediately started to throw up. In an article she wrote on Huffington Post, Ayyub states, "I started throwing up. I just didn't know what to do. I knew this was a big deal. I didn't know how

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[55] Maddocks, Sophie. "'A Deepfake Porn Plot Intended to Silence Me': exploring continuities between pornographic and 'political' deep fakes," *Porn Studies*, 7:4, 415-423, DOI: 10.1080/23268743.2020.1757499
[56] Maddocks, Sophie. "A Deepfake Porn Plot Intended to Silence Me".

to react, I just started crying."[57] Later, Ayyub had found out that this single video had been

shared on WhatsApp over 40,000 times.[58] She also browsed Twitter to find comments such as, "I

never knew you had such a stunning body," as well as people asking what her rates were for

sexual favors. Because of this, Ayyub was eventually sent to the hospital because of heart

palpitations, vomiting, and high blood pressure which she was experiencing due to trauma.

Embarrassed by the video, Ayyub also refused to see her family for a very long time. The

amount of pain that this pornographic deepfake caused her was insurmountable to any pain that

she had previously experienced.

Even more shocking was the Indian police department's reaction to Ayyub's situation.

Furious with India's handling of women's rights and sexual freedoms, Ayyub got in touch with a

feminist lawyer, who advised her to go to the police and report the crime directly. When she

arrived, there were six policemen who began watching the deepfake pornographic video in front

of her, all while smirking and holding in laughter. Ayyub stated in her article in disbelief, "I

couldn't believe it. I was a woman standing in front of them who had mustered up the courage to

file a complaint and they were trying to dodge it."[59]

Similar to Ayyub, 18-year-old Australian-Indian, law student Noelle Martin decided to

google herself out of curiosity. Expecting to see pictures of herself that she had posted on

Facebook or law assignments that she had completed for Macquarie University in Australia,

Martin unfortunately discovered something that drastically altered the course of her life, both

personal and professional. She discovered hundreds and thousands of explicit images of herself

photoshopped onto pornographic images and videos. These images and videos also included her

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[57] Ayyub, Rana. "I Was The Victim Of A Deepfake Porn Plot Intended To Silence Me". *HuffPost UK*, 21 Nov. 2018, www.huffingtonpost.co.uk/entry/deepfake-porn_uk_5bf2c126e4b0f32bd58ba316.
[58] Ayyub, Rana. "I Was The Victim Of A Deepfake Porn Plot Intended To Silence Me", 1.
[59] Ayyub, Rana. "I Was The Victim Of A Deepfake Porn Plot Intended To Silence Me", 1.

name, the school at which she was studying, and where she lived.[60] Disgusted and horrified, Martin took to activism: she decided to travel the world and hold talks, encouraging women to fight back against deepfakes and revenge pornography. Martin went on to become the face of litigation regarding New South Wales revenge porn, ultimately making and sharing deepfake porn illegal in the country.[61]

By circumventing consent, the perpetrators of both Ayyub and Martin's pornographic deepfake ultimately objectified them: they removed their face from their bodies and placed them onto a pornographic actress', which indicates that women's bodies are solely purposed to be visually consumed. Through the lens of objectification theory, it can be determined that this experience in which many women have gone through, can be likened to the third arena in Fredrickson and Roberts's objectification theory: objectification in visual media. In this area, women, such as Ayyub and Martin, experience instances of objectification due to the inherent notions of males to view the crime as a spectacle: something to be watched and entertained by, all while ignoring the serious criminal circumstances in which the videos came to existence.

We also see parallels between objectification theory and how it interacts with gender as well as race. According to one study focusing on hostile and benevolent sexism in India, gender discrimination has been and remains a pervasive phenomenon in India.[62] According to the National Family Health Survey, "27% of women have experienced physical violence since the

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[60] Melville, Kristi "'Humiliated, Frightened and Paranoid': The Insidious Rise of Deepfake Porn." *ABC*. August 29, 2019. https://www.abc.net.au/news/2019-08-30/deepfake-revenge-porn-noelle-martin-story-of-image-based-abuse/11437774.

[61] Laschon, Eliza. "Noelle Martin Was Just 17 When a Photoshopped Image Destroyed Her 'Dignity and Humanity.'" *ABC*. June 28, 2018. https://www.abc.net.au/news/2018-06-28/revenge-porn-crackdown-announced-by-wa-government/9920560.

[62] Jain, Suparna, Manpreet, Kaur, "Hostile and Benevolent Sexism in India: Analysis Across Cultures," *Scholar works*, 3. https://scholarworks.gvsu.edu/iaccp_papers/277

age 15 in India."[63] As Indian women, both Ayyub and Martin are negatively impacted by the existence of these statistics. In accordance with Objectification Theory, which claims that race must be taken into context when discussing gender, the sexism towards Indian women ties in with their own racial identity.

Furthermore, through separating their faces from their bodies and using it as a tool to enact revenge, perpetrators aimed to silence Ayyub and Martin and render them unable to defend themselves. We see this in many instances due to objectification. Traditionally, according to Fredrickson and Roberts, "it is not uncommon for… photographs to portray dismembered women… focusing exclusively on their bodies or body parts."[64] We can see exactly this happening here but instead of a photograph, it is exhibited in pornographic videos.

Ultimately, the perpetrators of these pornographic deepfakes are essentially resulting to a form of sexual violence. Author Brian Van Brut discusses this concept of the perpetrator's mind in detail from a gender-based violence perspective. In his examples, perpetrators use sexual violence to incite the threat of violence, control, and ultimately humiliate the victim.[65] According to Van Brut, sexual violence does not only serve to give sexual gratification to these perpetrators, it makes them feel as though they have complete domination over their victim and can control both their mind and body.[66] This is evident in both Ayyub and Martin's case, as the perpetrators are aiming to control them through the manipulation of their bodies, thus rendering them the object and damaging their reputation.

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[63] Jain, Suparna, Manpreet, Kaur, "Hostile and Benevolent Sexism in India", 3.
[64] Fredrickson, Barbara & Roberts, Tomi-Ann, "Objectification Theory", 176.
[65] Ward, Colleen A., and Inserto, Fathiah, *Victims of sexual violence: A handbook for helpers*. NUS Press, 1990.
[66] Van Brut, Brian. *Understanding the Role of Objectification and Misogyny in Aggression and Violence*. 32nd Annual Winter Roundtable on Cultural Psychology and Education. Alexandria, VA: Microtraining Associates, 2015.

CONCLUSION

Through the lens of objectification, it can be concluded that non-consensual deepfake pornography serves as another tool for primarily male perpetrators to limit women and their voices through manipulating their bodies. In the case of Rana Ayyub, Ayyub was silenced by perpetrators because she chose to spoke out against the Indian government due to the rape of a young girl. In Noelle Martin's case, she was silenced by perpetrators for speaking her mind on issues relating to litigation in New South Wales. Not only are pornographic deepfakes damaging to these journalists, causing them mental and physical harm that will affect them for the rest of their lives, they are also damaging to female journalists and women as a whole.

Through the use of objectification theory and other studies surrounding objectification, it can be proven that the creation of deepfake pornography ultimately damages the reputation of adult women on the internet. We see this through silencing, as well as using women's bodies and sexualities as tools for furthering the objectification of women. Many scholars have indicated the potential dangers of deepfakes, not only in the political sphere, but in regard to women's rights. These scholars indicate that women are increasingly unable to control their bodies and how they are represented, are undermined by deepfake pornographic harassment, as well as online harassment in general, and are often stripped of their identities, thus disarming them and creating significant amounts of pain, depression, and even some cases resulting in murder.

Deepfakes and other forms of sexual harassment towards women ultimately work because society systematically allows them to work. There are countless other forms of harassment and objectification directed towards women on the internet such as verbal attacks, physical attacks, and threats of rape. Deepfakes are simply another, incredibly dangerous way to limit women's sense of safety and ability to have a voice on the internet. In order to change women's rights on the internet, the representation of women in online media as a whole must be

drastically altered. This needs to happen not only within the internet itself but change also needs to occur within the advertising business, film and television shows, and other forms of media where women are often scrutinized and objectified.

Unfortunately, according to research conducted, it is unlikely that any amount of change will suffice in bringing the objectification of women on the internet to an end. Ultimately, non-consensual deepfake pornography exists in a system that often promotes and encourages the objectification of women. This can be proven by, again, offering up Karen Horney's point made in the 1920's that our society deems it so that "it is the socially sanctioned right of all males to sexualize all females, regardless of age or status."[67] For the past 100 years and possibly even dating back to the emergence of society, heterosexual males as well as females have been told through both societal customs and media, that sexual violence and objectification are inherently embedded into society. Without major, worldwide change, pornographic deepfakes and other forms of harassment towards women will continue to exist.

However, small changes are in effect throughout the globe due to journalists and governments working together to fix problems regarding deepfakes. In 2019, Representative Yvette Clark of New York issued a deepfake accountability act titled Defending Each and Every Person from False Appearances by Keeping Exploitation Subject to Accountability Act of 2019, in which she called for condemning the creation of synthetic media and aims to combat the spread of disinformation.[68] Similarly, in the United Kingdom in February of 2021, the UK Law Commission made a statement indicating that deepfake pornography should be made a crime.[69] Many journalists are also working alongside their local governments to end the creation of

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[67] Westkott, M, "Historical and Developmental Roots of Female Dependency".

[68] Congress.gov. "H.R.3230 - 116th Congress (2019-2020): Defending Each and Every Person from False Appearances by Keeping Exploitation Subject to Accountability Act of 2019." June 28, 2019. https://www.congress.gov/bill/116th-congress/house-bill/3230/text.

[69] Elks, Sonia. "Sharing 'deepfake' Porn Images Should Be a Crime, Says British Law Body." *Reuters*, February 26, 2021. https://www.reuters.com/article/britain-women-lawmaking-idUKL8N2KU7NL.

deepfake porn and its attack on female journalists.[70] Although the end of harassment towards women on the internet is far from near, the continued work of journalists, governments, and the general public will help mitigate the levels of objectification that female journalists and women alike experience for years to come.

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[70] Hao, Karen. "Deepfake Porn Is Ruining Women's Lives. Now the Law May Finally Ban It".

BIBLIOGRAPHY

Ayyub, Rana. "I Was The Victim Of A Deepfake Porn Plot Intended To Silence Me." *HuffPost UK*, 2018, www.huffingtonpost.co.uk/entry/deepfake-porn_uk_5bf2c126e4b0f32bd58ba316.

Balraj, Belinda. "Understanding Objectification Theory", *International Journal on Studies in English Language and Literature*, 2015, www.arcjournals.org/pdfs/ijsell/v3-i11/8.pdf.

Bartky Lee, Sandra. *Femininity and Domination: Studies in the Phenomenology of Oppression. Routledge*, 1990.

Berger, John. *Ways of Seeing. Penguin Modern Classics*, 2008.

Bjola, Corneliu, et al. "Digital propaganda, counterpublics and the disruption of the public sphere: the Finnish approach to building digital resilience,*" Cambridge Review of International Affairs*, 2020. DOI: 10.1080/09557571.2019.1704221

Chadwick, Andrew, and Vaccari, Cristian. "Deepfakes and Disinformation: Exploring the Impact of Synthetic Political Video on Deception, Uncertainty, and Trust in News." *Sage Publications*, SM+S, 2020, DOI: 10.1177/2056305120903408

Cole, Samantha. "We Are Truly Fucked: Everyone Is Making AI-Generated Fake Porn Now." *VICE, Motherboard,* 2018, www.vice.com/en/article/bjye8a/reddit-fake-porn-app-daisy-ridley.

Delfino, Rebecca. "Pornographic Deepfakes: The Case for Federal Criminalization of Revenge Porn's Next Tragic Act", 88 *Fordham L. Rev.* Vol. 887. December 2019, https://ssrn.com/abstract=3341593

Fitzgerald, Ali. "Our Deepfake Future." *Virginia Quarterly Review* 96 (1): 8–13, 2020, muse.jhu.edu/article/751341

Forestal, Jennifer. "Beyond Gatekeeping: Propaganda, Democracy, and the Organization of

    Digital Publics", *The University of Chicago Press Journals, Southern Political Science*

    Association, 2021, DOI: 10.1086/709300.

Fredrickson B-L, Roberts T-A. "Objectification Theory: Toward Understanding Women's Lived

    Experiences and Mental Health Risks". *Psychology of Women Quarterly*.

    1997;21(2):173-206. DOI: 10.1111/j.1471-6402.1997.tb00108.x

Garrison, Dee. "Karen Horney and Feminism." *Signs: Journal of Women in Culture and Society*,

    2015, DOI: 10.1086/493840.

Hall JA, Friedman GB. "Status, Gender, and Nonverbal Behavior: A Study of Structured

    Interactions between Employees of a Company." *Personality and Social Psychology*

    Bulletin. 1999. doi:10.1177/01461672992512002

Hao, Karen. "Deepfake Porn Is Ruining Women's Lives. Now the Law May Finally Ban It." *MIT*

    Technology Review, 16 Feb. 2021,

    www.technologyreview.com/2021/02/12/1018222/deepfake-revenge-porn-coming-ban/.

Hsiang, Emily. "Deepfake: An Emerging New Media Object in the Age of Online Content."

    Department of Arts and Cultural Sciences, Lund University, 2020,

    lup.lub.lu.se/luur/download?func=downloadFile&recordOId=9014787&fileOId=901479.

Henry, Nicola, and Anastasia Powell. "Beyond the 'Sext': Technology-Facilitated Sexual

    Violence and Harassment against Adult Women." *Australian & New Zealand Journal of*

    Criminology 48 (1): 104–18, 2015, DOI: 10.1177/0004865814524218.

Jain, Suparna, Manpreet Kaur, and Shradha Jain. "Hostile and Benevolent Sexism in

    India: Analysis Across Cultures".

    https://scholarworks.gvsu.edu/cgi/viewcontent.cgi?article=1282&context=iaccp_papers

Kietzmann, Jan, et al. "Deepfakes: Trick or Treat?" *Elsevier*, Business Horizons, 2020, DOI:

    10.1016/j.bushor.2019.11.006

Koirala, Samiksha. "Female Journalists' Experience of Online Harassment: A Case Study of

    Nepal." *Media and Communication 8*, 2021. DOI: 10.17645/mac.v8i1.2541.

Liv N, Greenbaum D. "Deep Fakes and Memory Malleability: False Memories in the Service of

    Fake News." *AJOB Neurosci.* 2020, doi: 10.1080/21507740.2020.1740351.

Maddocks, Sophie. "'A Deepfake Porn Plot Intended to Silence Me': exploring continuities

    between pornographic and 'political' deep fakes," *Porn Studies*, 7:4, 415-423, DOI:

    10.1080/23268743.2020.1757499

Marcia Westkott. "The Feminist Legacy of Karen Horney." *Yale University Press*, 1988,

    http://archive.org/details/feministlegacyof00west_0.

Martin, Noelle. *Online Predators Spread Fake Porn of Me. Here's How I Fought Back. TED*,

    2017,

    www.ted.com/talks/noelle_martin_online_predators_spread_fake_porn_of_me_here_s_h

    ow_i_fought_back#t-285570.

Mayr, Eva, et al. "Trust in Information Visualization." *Danube University Krems*, 2019, DOI:

    10.2312/trvis.20191187.

Sarah Hewitt, T. Tiropanis, and C. Bokhove. *The problem of identifying misogynist language on

    Twitter (and other online social spaces)*. In Proceedings of the 8th ACM Conference on

    Web Science (WebSci '16). *Association for Computing Machinery*, New York, NY,

    USA, 2016, DOI: 10.1145/2908131.2908183

Scott, Daniella. "Deepfake Porn Nearly Ruined My Life." *ELLE*, 6 Mar. 2020,

    www.elle.com/uk/life-and-culture/a30748079/deepfake-porn/.

Socher, Richard, et al. "Deep Learning for NLP (without Magic)." *ACM Digital Library*, 2012,

    dl.acm.org/doi/10.5555/2390500.2390505.

Signoretti, Nicoletta. "A Study of Gender Advertisements. A Statistical Measuring of the

    Prevalence of Genders' Patterns in the Images of Print Advertisements." *Proceedings,*

    2017. DOI: 10.3390/proceedings1090947.

Van Brut, Brian. *Understanding the Role of Objectification and Misogyny in Aggression and*

    Violence. 32nd Annual Winter Roundtable on Cultural Psychology and Education.

    Alexandria, VA: *Microtraining Associates,* 2015.

Wagner, Travis L., and Ashley Blewer. "The Word Real Is No Longer Real': Deepfakes,

    Gender, and the Challenges of AI-Altered Video." *Open Information Science*, 2019, DOI:

    10.1515/opis-2019-0003.

Ward, Colleen A., and Fathiah Inserto. *Victims of Sexual Violence: A Handbook for Helpers*.

    NUS Press, 1990.

Westkott, M. "Historical and Developmental Roots of Female Dependency." *Psychotherapy:*

    Theory, Research, Practice, Training, 1986, DOI: 10.1037/h0085600