Narrative Transportation in Documentary Film: How Immersion into the Documentary Film Hillbilly Affects Viewers' Attitudes

Alayna G. Fuller
West Virginia University, agf0006@mix.wvu.edu

Follow this and additional works at: https://researchrepository.wvu.edu/etd

Part of the Appalachian Studies Commons, and the Film and Media Studies Commons

Recommended Citation
Fuller, Alayna G., "Narrative Transportation in Documentary Film: How Immersion into the Documentary Film Hillbilly Affects Viewers' Attitudes" (2022). Graduate Theses, Dissertations, and Problem Reports. 11230.
https://researchrepository.wvu.edu/etd/11230

This Thesis is protected by copyright and/or related rights. It has been brought to you by the The Research Repository @ WVU with permission from the rights-holder(s). You are free to use this Thesis in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you must obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/ or on the work itself. This Thesis has been accepted for inclusion in WVU Graduate Theses, Dissertations, and Problem Reports collection by an authorized administrator of The Research Repository @ WVU. For more information, please contact researchrepository@mail.wvu.edu.
Narrative Transportation in Documentary Film: How Immersion into the Documentary Film Hillbilly Affects Viewers’ Attitudes

Alayna Fuller

Thesis submitted
to the Reed College of Media
at West Virginia University

in partial fulfillment of the requirements for the degree of

Master of Science in Journalism

Geah Pressgrove, Ph.D., Chair
Travis Stimeling, Ph.D.
Dana Coester, M.A.
Joel Beeson, Ph.D.

Department of Journalism

Morgantown, West Virginia
2022

Keywords: Appalachia, narrative transportation, stereotypes, hillbilly, attitude, perceptions
Copyright 2022 Alayna Fuller
Abstract

Narrative Transportation in Documentary Film: How Immersion into the Documentary Film Hillbilly Affects Viewers’ Attitudes

Alayna Fuller

For decades, film has relied on stereotypical misconceptions to depict Appalachian people on screen. Research has demonstrated that visual narratives and the experience of narrative transportation has the power to change individuals’ perceptions about information conveyed implicitly or explicitly within a story. Presently, no empirical research has examined how viewer attitudes form based on their level of immersion into an Appalachian documentary film. To fill this gap, this study offers a quantitative approach to examine if the documentary Hillbilly narratively transports the viewer into the world of Appalachia and shifts audience perceptions of the stereotypical Appalachian persona or “hillbilly.” The film Hillbilly takes a media-against-media approach to challenge stereotypical Appalachian misconceptions. In this study, viewer attitudes and perceptions were assessed through a field experiment following a pretest-posttest experimental design using a sample of university students (n = 57) with theoretical grounding in narrative transportation theory. Research from this study suggests that viewers changed their perceptions of Appalachian people after watching the documentary, but narrative transportation was not the driving force in this shift. To identify this shift, this study deployed a new working model that extends previous attitude models to include variables of stereotypes and perceptions. This study offers significant advances in theory surrounding how media-against-media documentaries can be used to overcome audience biases, while proving that the documentary film Hillbilly was powerful enough to shift viewers' perceptions of Appalachian people.

Keywords: narrative transportation, stereotypes, hillbilly, Appalachia, attitude, perceptions
Acknowledgments

First, I’d like to thank my committee chair Dr. Pressgrove. Thank you for your guidance and abundant encouragement throughout this process and for always keeping me motivated. Your faith in me made all the difference in my completion of this thesis. Thank you for making this journey so exciting and fulfilling.

I would also like to thank my committee members Dr. Stimeling, Dr. Beeson and professor Coester for your support and thoughtful feedback during this process. Your expertise immensely helped me shape my thesis.

To my family, I’m incredibly grateful for your constant love, support and guidance. Thank you for instilling in me the confidence to achieve anything I set my mind to. All of you are the best role models in your own individual ways, and I’m thankful to be surrounded by such a loving family. Thank you for all that you do.

Finally, to my boyfriend Wojtek, thank you for being my biggest supporter, not only through this process, but throughout our college years. Your love and encouragement has gotten me to where I am today, and I could not be more grateful for you. Thank you for everything you do and for who you are.
# Table of Contents

Introduction .................................................................................................................. 1

Literature Review .......................................................................................................... 3
  Appalachian Stereotypes in Film .............................................................................. 4
  Alternative Narratives that Challenge Appalachian Stereotypes ....................... 5
  Narrative Transportation Theory ............................................................................ 9

Narrative Understanding ............................................................................................. 12
  Attentional Focus .................................................................................................... 12
  Emotional Engagement ......................................................................................... 13
  Narrative Presence ............................................................................................... 14

Narrative Persuasion .................................................................................................. 15
  Attitude .................................................................................................................. 16

Research Questions and Hypotheses ......................................................................... 18

Methodology ................................................................................................................ 20

Findings ...................................................................................................................... 26

Discussion .................................................................................................................. 34

Limitations and Future Research .............................................................................. 39

Conclusion .................................................................................................................. 40

References .................................................................................................................. 42
Introduction

Stereotypes of Appalachians have existed in American visual culture for nearly two centuries with many scholars analyzing the methods and meanings behind these images (Massey, 2007). These visual stereotypes presented in media and film by those living outside of the Appalachian region negatively depict those living within the region. Appalachian stereotypes are present in a variety of different forms of media including documentary films. For example, the ABC network news program 20/20 aired a show called *A Hidden America: Children of the Mountains* on February 18, 2009. This documentary news program hosted by Diane Sawyer examined a series of cases in which poverty and substance abuse intersect (Massey, 2009). The program focused on telling the story of poor Appalachia, and the way the documentary was framed relied on rhetorical misconceptions (Massey, 2009). This rhetoric has persisted for decades in documentary film. However, the documentary film *Hillbilly* explores over one hundred years of media representation of mountain and rural people in Appalachia. The documentary offers exploration of how the nation sees and thinks about poor, rural America and actively challenges stereotypical misconceptions (Media Working Group, 2021). Exploring and deconstructing those stereotypical misconceptions about Appalachians in a visual narrative allows the audience to see a new perspective opposing what has typically been shown in film for decades.

Visual narratives are commonly used as a mechanism for informing, engaging, persuading, and educating audiences (Pressgrove et al., 2018). Research has shown that a story can immerse the receiver in a transformational experience (Phillips & McQuarrie, 2010), and the extent to which one becomes engaged, transported, or immersed in a narrative influences the narrative's potential to affect subsequent story-related attitudes and beliefs (Butler et al., 1995).
To this end, the author asserts that visual narratives in documentaries may also transport viewers into an immersive world, which holds the informational, educational, engaging and persuasive dimensions of a story. More specifically, as posited by narrative transportation theory, when viewers lose themselves in a story, their attitudes and intentions change to reflect that story (Green, 2008). For example, in a study conducted by Braddock and Dillard (2016), findings indicated that exposure to narratives can affect message recipients’ beliefs, attitudes, intentions, and behaviors such that they move into closer alignment with viewpoints presented in those narratives. Therefore, the more recipients are transported into the narrative, the more they are persuaded by the story (Green & Brock, 2002).

Despite considerable progress in the study of narrative experience itself, narrative transportation and narrative persuasion research remains fragmented in the context of documentary film and its empirical findings (Green et al., 2004). A documentary narrative is defined as the “creative treatment of actuality,” or a characterization that simultaneously distinguishes the documentary from the fiction film, which is not thought to be primarily a treatment of actuality, and the nonfiction film, which is not thought to be creative or dramatic (Plantinga, 2005). A documentary is often described as a subset of nonfiction films, characterized by more aesthetic, social, rhetorical or political ambition. The intent of the documentary narrative is to persuade viewers to form or continue to hold the attitude of belief toward certain states of affairs, situations, events and propositions (Plantinga, 2005). According to Zwarum and Hall (2012), more research is needed to understand what happens when audiences become involved with a story that could result in persuasion. To fill this gap, this study offers a quantitative approach to distinguish the extent to which viewers experience narrative transportation, which could lead to narrative persuasion in the form of attitudinal shifts that
reflect the narrative of the documentary film. More specifically, the purpose of this exploratory
research is to understand the way audiences experience narrative transportation in the
documentary film *Hillbilly* and how that transportation affects their attitudes toward Appalachia.

To accomplish this aim, the author will conduct a field experiment to examine viewer
attitudes before and after watching *Hillbilly*. Further, the author will employ the narrative
engagement scale created by Busselle and Bilandzic (2009) which distinguishes among four
dimensions of experiential engagement in narratives: narrative understanding, attentional focus,
emotional engagement and narrative presence. This study focuses on understanding the
persuasive power of narratives in the form of documentary film and aims to understand how this
form of visual narrative could shift attitudes.

**Literature Review**

For decades, the film industry has stereotypically portrayed Appalachians as poor,
uneducated and uncivilized on screen. A common example is the television program *The Beverly
Hillbillies*, which was a show based on the negative stereotypical depictions of Appalachian
people. The show depicted a poor, uneducated hillbilly family that moved to Hollywood after
striking oil on their land in the Appalachian Mountains (Cooke-Jackson & Hansen, 2008). A
more recent example is the television show *Buckwild*, which also perpetuates negative
stereotypes about people living in the Appalachian region. The show follows the hillbilly
narrative, which is often correlated with Appalachian people in entertainment media for humor
and ridicule. Humor that belittles Appalachians or members of other subcultures is often used
against the group and is done at the group’s expense (Cooke-Jackson & Hansen, 2008).

*Hillbilly* is a documentary that focuses on challenging the negative stereotypical
depictions of Appalachians in the media by presenting true Appalachians on screen who proudly
identify as hillbillies. In their film, directors Sally Rubin and Ashley York explore decades of Appalachian media portrayals and present a more in-depth depiction of the complex people that live in the region. This film offers a varied point of view of a historically misunderstood region by examining the experience of rural voters and by featuring diverse communities in Appalachia. Directors often use media to campaign for their own stance when reacting to portrayals on screen that they dislike (Speer, 1993). To promote systematic action, Rubin and York used a media-against-media approach to expose the falsities in stereotypical Appalachian media portrayals.

**Appalachian Stereotypes in Film**

Stereotypical Appalachian media portrayals are common in film, and it is important to discuss how these depictions affect people within the Appalachian region. Understanding how Appalachian stereotypes are presented in film will provide some context before the examination of the main topic of this research, which is the extent to which viewers of the Appalachian documentary film *Hillbilly* are narratively transported and possibly persuaded by the film. Cooke-Jackson and Hansen (2008) define stereotypes as a fixed mental image of a group that is frequently applied to all its members. Specifically, the authors suggest that stereotypical images of Appalachians stem from accurate depictions of a few people in a subculture that are applied to all members of the group. Those stereotypes are often negative and may ignore the realities and challenges facing the group. From this foundation, the authors found that stereotyping Appalachians in entertainment media is often normalized, leading media consumers to believe that the inaccurate depictions reflect reality (Cooke-Jackson & Hansen, 2008).

The Appalachian in stereotyped form is a product of a national imagination that has culled from the rich tapestry of Appalachian identities to produce oversimplified and anachronistic characteristics that stand in for the entire region’s people (Massey, 2007). Drawing
from this definition, Massey examined the ways in which these stereotypes circulate through identity codes in visual culture and analyzed the methods and meanings behind these depictions. She examined this by dissecting five different novels about the negative functions of Appalachian identities. Ultimately, Massey found that recent media depictions of the “everyday” Appalachian are often degrading, visually representing rural mountain people as hillbillies, rednecks and white trash. This media and film rhetoric indicts Appalachians for their laziness, ethnicity, class, sexuality and gender (Massey, 2007). This research draws from Cooke-Jackson and Hansen’s (2008) definition of Appalachian stereotypes. Building on this foundational work, the current study defines Appalachian stereotypes as the negative and oversimplified depiction of rural mountain people that does not accurately reflect the reality of those living in the region.

Alternative Narratives that Challenge Appalachian Stereotypes

Diverse Appalachian voices, experiences and histories are often silenced, which consequently contributes to the country’s lack of understanding of this region and its people. Simply stated, it is not appropriate to label a small but visible subgroup as unambiguously representative of 25 million people inhabiting a geographic region spanning over 700,000 square miles (Catte, 2018). Scholars have written about the diversity of the Appalachian region, pushing back against the stereotype of the white, blue collar, dysfunctional hillbilly (Catte, 2018; Colley, 2021; Eller, 1982, 2008; Harkins, 2004; McCarroll, 2018). Author of *Miners, Millhands, and Mountaineers: Industrialization of the Appalachian South, 1880–1930*, Ronald Eller (1982) countered stereotypical narratives of Appalachian people by explaining that mountaineers were involved in lively trade. He argued that as the region shifted toward industry, people from Appalachia became agents not only of their own employment with lumber companies or coal operators, but also were active participants in union formation and union strikes against these
same corporations (Colley, 2021). Appalachian scholars have also explored the diversity of the region, examining the lives of African Americans (Rice & Tedesco, 2015), Native Americans (Carney, 2005; Cook, 2000), the LGBTQ+ community (Hubbs, 2014) and the strong tradition of activism within the region (Catte, 2018; Colley, 2021).

While there are many narratives that negatively depict Appalachian people, there are others that confront these stereotypical depictions and portray the people living in the Appalachian region in a way that accurately reflects their reality. One narrative that counters these stereotypical depictions is the book *Back Talk from Appalachia* (Billings et al., 2001), which is a collection of responses from various authors addressing Appalachia’s challenge to century old images, demeaning portrayals and misleading assumptions about the region and its people. The book confronts the narratives in both literature and film that blame Appalachians for their problems and trivialize the complex political and economic issues facing the region. The book also notes that many narratives perpetuate the “idea of Appalachia,” which not only hides the exploitation of the land and people in the region, but obscures the diversity of conditions, relationships and cultures within Appalachian society itself like diversity of race, gender and class as well as diversity in religion, education and history. *Back Talk From Appalachia* offers many rebuttals to the common stereotypes that have plagued the Appalachian region including; geographic location not causing isolation resulting in a disconnect culturally and economically from the rest of the country, stereotypical writings of Appalachians stemming from outsiders' ignorance to Appalachians’ way of life and the reality that there was never a point at which an all-white population characterized the region. The film *Hillbilly* brings attention to this as well by highlighting ways in which movies and television shows, such as *Deliverance* and *Hee Haw*,
use only stereotypical attributes for their characters and characterization of the region, therefore intentionally leaving out any complexity. Ledford (2001, p. 64) writes:

Backwardness, superstition, and ignorance, or innocence, simplicity, and kindness- the hillbilly embodied it all. But this hillbilly did not step fully formed out of post- Civil War America. Elements of Li’l Abner, Jed Clampett, and their Deliverance kin- and the purposes they serve- formed during the colonial, early Republic, and antebellum periods, coalescing out of struggles over land, money, and class. And when we find hillbillies today in movies, newspapers, and plays, their presence still reflects the nation’s struggle over the uneven ground of economics and class.

Another book that addresses the harmful stereotyping of Appalachian people is Appalachian Reckoning: A Region Responds to Hillbilly Elegy. This book offers a rebuttal to J.D. Vance’s book, Hillbilly Elegy: A Memoir of a Family and Culture in Crisis, which presents a simplistic portrayal of white poverty in the Appalachian region and turns to stereotypical characteristics like lazy and impoverished to describe Appalachians. Vance concludes that the hillbilly is to blame for his own depravity. Appalachian Reckoning: A Region Responds to Hillbilly Elegy (Harkins & McCarroll, 2019) is a collection of responses from Appalachian people throughout the region telling their own diverse and complex stories through scholarship, prose, poetry and photography. The essays and creative work in this book provide a personal portrait of a place that is culturally rich and economically distressed by documenting Appalachia’s intellectual vitality, spiritual richness and progressive possibilities. A quote from the book reads, “Amidst the blue ridge mountains, there are remarkable expressions of life. Tapestries woven by generations that are always on trial by those who amputate hope from what once was native land” (Harkins & McCarroll, 2019, p. 85).
The stigmatization of Appalachian whiteness occurs through the stereotype of the ignorant hillbilly, which is similar in many ways to ‘white trash’ (Scott, 2009). Narratives in film or on television often fixate on white Appalachian poverty which is presented along with a suggestion that white people shouldn’t be living like this (Scott, 2009). Since the mid-19th Century, Appalachia has been considered the opportune place for these marginalized whites in the United States and hillbillies are simultaneously stigmatized and idealized in the national culture (Scott, 2009). This perception that only includes white people in the Appalachian narrative translates to film and literature. “Turning the critical race lens toward white objects, scholars and viewers look closely at the construction of whiteness in film and literature, based on the idea that to notice only the construction of nonwhites is to privilege and normalize white representations- as if they were not constructed” (McCarroll, 2018). In Hillbilly, interviewee, writer and feminist theorist, bell hooks emphasized this skewed perception as well. “No matter how much scholars have tried to remind the world that Appalachia is not defined by whiteness, people hold to the image of Appalachia as white so that we erase both the cultures in the past, but we erase them in the present as well.”

The myth of whiteness in the Appalachian region is not only due to misinformation, invisibility, complacency, or the institutionalization of racist structures. Overt racism is part of political agendas that benefit from the diversion of attention from the problems of African Americans and other marginalized groups (Campbell, 2011). “Sociological analyses must recognize the distribution patterns of African Americans and other groups in the mountains. We must become familiar with Appalachia’s histories and ideologies in order not to make the mistake of omitting black realities that can occur through aggregate snapshots of the region” (Campbell, 2011). Appalachia is a region rich in culture and diversity, which has historically not
been shown in film and literature. These narratives do not reflect reality and seek to erase the
diverse people of Appalachia from history, which can be detrimental to how the country
perceives this region and its people. These counter narratives, including the film *Hillbilly*, are
important to acknowledge in the framework of this study as they help further understanding in
how narratives can be used to change viewers’ perceptions to reflect a more accurate reality of
Appalachia.

**Narrative Transportation Theory**

A central aim of this study is to examine if the documentary *Hillbilly* narratively
transports the viewer into the world of Appalachia and shifts audience preconceived notions of
the stereotypical Appalachian persona. In line with previous research, the author posits that this
change in perceptions will result from a state of detachment from the world of origin that the
story receiver experiences because of his or her engrossment in the story (Gerrig, 1993). Scholars
have previously described narrative transportation as a condition that occurs when an individual
experiences the feeling of entering the world evoked by a narrative because of empathy for story
characters and imagination of the story plot (Cohen et al., 2015). Further, it is described as a state
of detachment from the world, as though one is being carried away by the story (Cohen et al.,
2015; Green & Brock, 2000). In more technical terms, transportation into a narrative world is
conceptualized as a distinct mental process and an integrative melding of attention, imagery, and
feelings (Green & Brock, 2000). In Green and Brock’s articulation of the concept, they defined
narrative transportation theory as a convergent process where all mental systems and capacities
become focused on events occurring in the narrative. In more recent studies, Busselle and
Bilandzic (2009) defined narrative transportation as audience members' perceptions of a
mediated world as more immediate than the actual world, which is an important aspect of media
experiences. An example of narrative transportation as defined by Bezdek and Gerrig (2017) is when people report feeling that they have focused attention into a narrative world, and disengaged attention from the physical environment.

Research has demonstrated that this experience of narrative transportation has the power to change individuals’ beliefs about information conveyed implicitly or explicitly within the story (Green & Clark, 2013). Narrative transportation is based on the notion that the recipient of a narrative, in a metaphorical sense, travels to a different world, inducing a holistic experiential state marked by changes in cognitive, emotional, and attentional processing, as well as by mental imagery (Isberner et al., 2018). Theory suggests that the more strongly recipients are transported, the more they are persuaded by the story (Green & Brock, 2002). Specifically, an intense transportation experience can enhance the persuasive impact of narrative information of the viewers’ beliefs (Appel & Richter, 2010) and may cause viewers to be more susceptible to arguments embedded in the narratives by mitigating negative responses (Petty & Cacioppo, 1986). Stated another way, since narrative transportation’s conceptualization, research has demonstrated that the transported “traveler” can return changed by the journey (Gerrig, 1993).

When authors craft their narratives, their goal is to immerse people in the worlds they create (Bezdek & Gerrig, 2017). As examples of the power of this immersive process, narrative transportation theory has been used to show narrative persuasion, such as attitudinal responses, in many different narrative contexts such as viewers’ transportation into film (Bezdek & Gerrig, 2017), fantastical narratives online (Zwarun & Hall, 2012), television binge-watching (Warren, 2020), narrative messages in blogs (Lane et al., 2013) and immersive technologies that simulate virtual worlds such as video game environments (Shin & Biocca, 2017). For example, in a study conducted by Bezdek and Gerrig (2017), the authors examined the way in which viewers’
attitudinal tuning changed as they watched suspenseful film scenes and found support for the idea that engaging films can, at times, narrow the scope of viewers’ attention and impair attention to the extra narrative environment. Despite use of this theory in a variety of different entertainment contexts, there is no past research that considers visual narratives that are intended to challenge an entrenched belief like stereotypes of Appalachians using documentaries.

To this end, the current study explores the ways in which narrative transportation may lead to narrative persuasion by assessing attitude change after watching the documentary *Hillbilly*. In so doing, the author extends to a new context her understanding of how a transported viewer may change their attitudes and beliefs to match a certain narrative. This work builds on the work of Green and Brock (2000), who used an experiment to demonstrate that participants entered into the imagined world of the story and while in this state of immersion, were more open to attitudinal change. Their work demonstrated that transported readers may be less likely to disbelieve or counter argue story claims, and therefore their beliefs may be influenced (Green & Brock, 2000). Further, transportation may also make narrative experience seem more like real experience and research has shown that direct experience can be a powerful means of forming attitudes (Fazio & Zanna, 1981).

In the context of this study, narrative transportation is defined as the extent in which an individual is transported into the narrative world of a documentary. In experimental research, Busselle and Bilandzic (2009) advanced a transportation scale to measure the four dimensions of narrative engagement as a means for understanding how viewers are transported into a narrative. The dimensions the authors provided to measure this were narrative understanding, attentional focus, emotional engagement, and narrative presence. The results of this work advanced the conceptualization of the experience of engaging with a narrative by identifying fundamental
sensations. Thus, in the current context, the author will use Busselle and Bilandzic’s (2009) Likert-style transportation scale to examine participants’ narrative understanding, attentional focus, emotional engagement, and narrative presence after watching the documentary film *Hillbilly*.

**Narrative Understanding**

Seminal work in narrative understanding describes it as the mental mechanism with which individuals understand previously constructed narratives, and how individuals order and make meaning out of unordered information they take in from the world (Worth, 2004). More recently, Busselle and Bilandzic (2009) defined narrative understanding as ease in comprehending a narrative, or from a mental models perspective, ease in constructing models of meaning. Building on this work, in the context of this study, narrative understanding is defined as the comprehension of a constructed narrative within a documentary film and how meaning is formed from the narrative. Transportation into a specific narrative could either strengthen participants’ pre-existing attitudes or change them based on how they understand the story presented (Cohen et al., 2015).

**Attentional Focus**

The attentional focus dimension of narrative transportation captures the psychological processes that occur when people experience an engaging narrative (Bezdek & Gerrig, 2017). Attentional focus occurs when a viewer is unaware of focused attention and should become aware only if attention drifts or must be refocused (Busselle & Bilandzic, 2009). In other words, an individual should not be aware that they are not distracted. An attentional focus study showed that when subjects were immersed in the narrative of a movie with their attentional focus fixed on the screen, they were oblivious to the different edits made by directors, which might have
otherwise resulted in a jarring visual experience (Cohen et al., 2015). Attentional focus is a determining factor in an individual’s ability to be narratively transported. This study draws from Busselle and Bilandzic’s (2009) definition of attentional focus. In the context of this study, attentional focus is defined as a viewer’s unawareness of focused attention on a documentary film narrative.

**Emotional Engagement**

Emotional engagement is defined as the concerns and emotions viewers have with respect to characters, either feeling the characters’ emotions (empathy), or feeling for them (sympathy) (Busselle & Bilandzic, 2009). Identification with characters allows individuals to overcome their natural tendency to limit their view to a single perspective by taking on the character’s point of view (Cohen, 2001). According to Bae and Lee (2014), emotional engagement with characters within a narrative can lead to a deeper level of immersion with, or absorption into, the story. Character-led stories provide a significantly greater sense of atmosphere and emotion, further supporting deep immersion (Jones, 2017). The result is that the user is more likely to respond emotionally to the story when the protagonists tell their own story and are the focus of the narrative (Jones, 2017). Literature indicates that narratives can change attitudes through increased narrative engagement with the story happening on-screen (Busselle & Bilandzic, 2008; Green et al., 2004). This study bases the definition of emotional engagement on the meaning from Busselle and Bilandzic’s (2009) conceptualization. In the context of this study, emotional engagement is defined as the empathy and sympathy a viewer feels for the characters within a documentary narrative.
Narrative Presence

Narrative presence has been defined as the perceptual illusion of nonmediation (Lombard & Ditton, 1997), as well as “the subjective experience of being in one place or environment, even when one is physically situated in another” (Witmer & Singer, 1998, pp. 225–240). Seminal work described narrative presence as encompassing feelings of participation, embodiment, or disembodied observation in a story world (Gerrig, 1993). It reflects experiences where fiction readers, movie audiences, or video game players report feelings of being transported into a story (Gerrig, 1993). Stated another way, narrative presence includes both dimensions of involvement and immersion: involvement is a psychological state experienced as a consequence of focusing one’s energy and attention on a coherent set of stimuli; immersion is a psychological state characterized by perceiving oneself to be enveloped by and interacting with an environment that provides a continuous stream of stimuli (Witmer & Singer, 1998). Based on these conceptualizations, narrative presence has been recognized as an affective-cognitive construct that characterizes an audience’s perceived relationship with a story (Rowe et al., 2007).

In a more recent conceptualization, Busselle and Bilandzic (2009) define narrative presence as the sensation that one has left the actual world and entered the story. Busselle and Bilandzic examined narrative presence as a two-fold phenomenon. One was an intense focus resulting in a loss of awareness of self and surroundings. The second was the sensation of entering another space and time, which should be unique to narratives. This study draws from Busselle and Bilandzic’s (2009) definition of narrative presence. In the context of this study, narrative presence is defined as the extent to which a viewer feels as though they have entered into the narrative world of the documentary. Literature indicates that narratives can change
attitudes through increased presence in the environment shown on-screen (Li et al., 2002; Lombard & Ditton, 1997; Steuer, 1992).

**Narrative Persuasion**

Information presented in a narrative is better remembered and more influential than the same information presented in a non-narrative format (Wyer et al., 2002). Narratives have been found to change viewers’ perceptions because the underlying message is folded into the plot of the story, therefore making the film less obviously persuasive (Pressgrove et al., 2020). Empirical evidence suggests that viewer transportation into a narrative influences their real-world beliefs (Green & Brock, 2000). The more viewers are invested in a narrative, the more susceptible they are to the persuasive messages in the narrative, therefore driving them to change their attitudes to match those of the story. Empirical evidence suggests that narratives can achieve this persuasion (Dillard et al., 2010; Green & Brock, 2000; Slater & Rouner, 2002) because viewers are less likely to challenge the persuasive content in the narrative as doing so would mean withdrawing from the story. “Audiences often temporarily lose awareness of their own personal beliefs, attitudes, and own held knowledge that could contradict the persuasive message—a core process for successful narrative persuasion” (Slater & Rouner, 2002). When viewers are immersed into a story, engaged with a narrative and invested in the characters, there is a greater chance that they will be persuaded by the narrative and shift their attitudes accordingly (de Graaf et al., 2016; Keer et al., 2013). The match between the emotional arc of the narrative and recipients’ affective responses towards the characters and events depicted in the story is crucial for narrative persuasion as well (Appel et al., 2019).

Persuasive messages in a narrative are those designed, either implicitly or explicitly, to change one's attitudes or behavior (Dillard et al., 2010). In documentary film specifically, “truth”
may be subtly reframed through creative treatment, leading to a more persuasive narrative created by directors (Matthews, 2021). “Because a person in a transported state is engrossed, having devoted his or her cognitive resources to the event playing out in the narrative, he or she may be less likely to critically assess the persuasive message in the narrative” (Brusse et al., 2017). This persuasion can lead participants who report being narratively transported to also report stronger story-consistent beliefs and attitudes (Green & Brock, 2000). Stated another way, the levels of participant engagement and immersion into a story should be positively related to agreement with story-related attitudes (Busselle & Bilandzic, 2009). Research has yielded evidence for a positive association between self-reported transportation and indicators of persuasive effects such as attitudes (Gebbers et al., 2017; Mazzocco et al., 2010).

**Attitude**

This study aims to examine narrative transportation’s ability to predict narrative persuasion as measured by assessing viewers’ attitudes towards Appalachian people before and after they watch the documentary film *Hillbilly*. While research has not specifically explored attitude change in the context of narrative transportation after watching a documentary, research by Green and Brock (2000) has revealed greater attitude change among readers who were “transported” into the narrative world. They indicate that “to the extent that individuals are absorbed into a story or transported into a narrative world, they may show effects of the story on their real-world beliefs” (Green & Brock, 2000, p. 701). Transported story receivers are also more likely to perceive the story plot as desirable and truthful, which positively affects their attitudes (Escalas 2004a, 2007; Green & Donahue, 2011; Wang & Calder, 2006). In more contemporary work, Pressgrove and Bowman (2020) found that narrative engagement, a central
dimension of narrative transportation, impacted attitudes towards video content in the context of prosocial storytelling.

Further, prior research has shown that varying forms of film can have a significant impact on perceptions of stereotypes, change attitudes towards certain groups of people and lead to newly formed opinions on various issues. For example, in a study conducted by Kubrak (2020), the author identified changes in the attitudes of young people towards elderly people after watching a film in which the main characters were elderly. Using a psychosomatic technique that included 25 seven-point scales designed to identify attitudes towards elderly people, respondents evaluated their various characteristics before and after watching the film (Kubrak, 2020). The author concluded that young people changed their assessments of regulatory, cognitive and emotional characteristics of the elderly people after watching a film about the elderly. In another study conducted by Harris (2002), HIV films contributed to sympathy for people living with HIV and the portrayal of mental disorders in movies had an effect on individuals’ knowledge about and attitudes toward the mentally ill.

Building on previous work that has demonstrated the power of film to impact attitudes, as well as work by Pressgrove and Bowman (2019) that demonstrates the power of narrative transportation to impact attitudes, the current study will assess narrative persuasion by determining whether viewers’ attitudes shift after being immersed in a documentary film that challenges negative portrayals and stereotypes of Appalachian people. It is important to note that viewers may have an already established attitude around a particular topic, which may affect the viewers’ processing such that they understand the narrative in a manner consistent with their prior attitudes (Cohen et al., 2015), therefore attitude will be assessed both before and after watching the documentary. Further, there are two determinants that play a role in attitude: how
desirable or undesirable story receivers find the story plot (affective and cognitive responses) and how truthful they perceive it to be (beliefs) (Van Laer et al., 2014).

To assure that measures of attitudes encompass multiple different aspects of cognitions and feelings, the items that could be representative of perceptions of Appalachians were drawn from four different studies (Jenaro et al., 2018; Morland et al., 1969; Osgood, 1964; Park et al., 2015). From Jenaro et al. (2018), who studied social perceptions towards groups with different types of disabilities, adjectives such as “incompetent-competent, hostile-friendly, bad-good and dangerous-harmless” were chosen. From Morland et al. (1969), who studied the cross-cultural comparison of racial and ethnic attitudes in four societies, adjectives such as unpleasant-pleasant, weak-strong and dirty-clean” were chosen. From Osgood (1964), adjectives such as “powerless-powerful, wild-tame and naive-shrewd” were drawn from his language and culture communities study, which used a semantic differentiation scale. From Park et al. (2015), adjectives such as “unhealthy-healthy, shameful-honorable and indecent-refined” were drawn from the authors’ sexual attitudes study. All of these studies analyze culture from different perspectives and using specific items from these studies will give the author a multidimensional measure of attitude.

**Research Question and Hypotheses**

Scholars have found that narrative transportation can affect individual’s cognitive responses to visual mediums such as online narratives, television films and immersive technologies that simulate virtual worlds such as video game environments (e.g., Shin et al., 2017; Warren, 2020; Zwarun et al., 2012). Further, previous research has shown that transportation into a specific narrative could either strengthen individuals’ pre-existing attitudes or change them based on **narrative understanding** (Cohen et al., 2015). Further, studies have
found that more attentional focus in viewers leads to deeper immersion, and therefore viewers are more susceptible to persuasion from the narrative (Busselle & Bilandzic, 2009; Cohen et al., 2015). Research also indicates that narrative engagement can, in some contexts, lead to attitude change (Pressgrove & Bowman, 2019). Similarly, emotional engagement with characters within a narrative can lead to a deeper level of immersion with, or absorption into, the story (Bae & Lee, 2014; Cohen, 2001). Literature also indicates that narratives can change attitudes through increased presence in the environment shown on-screen (Li et al., 2002; Lombard & Ditton, 1997; Steuer, 1992) and research suggests that immersion into a narrative can shift viewers’ attitudes (Busselle & Bilandzic, 2009; Green & Brock, 2000; Kubrak, 2020). In other words, the preponderance of research indicates that the more viewers are narratively transported, the more susceptible they are to the persuasive messages in the narrative, therefore driving them to change their attitudes to match those of the story.

While attitude change based on narrative transportation has not been tested specifically in the context of Appalachian documentaries that challenge stereotypical film portrayals of Appalachian people, the author expects findings from previous work to hold true in this new context and proposes the following hypothesis:

**RH1:** Increased narrative transportation [(a) narrative understanding, (b) attentional focus, (c) emotional engagement, (d) narrative presence] will lead to narrative persuasion determined by attitude change.

Because this is the first study to explore an Appalachian documentary, the author will also look at the unique contribution of each of these dimensions of narrative transportation upon attitudes with the hope of better informing theory and practice. Thus, the author proposes the following research question:

**RQ1:** Which dimension of narrative transportation is most effective in shifting viewers’ attitudes?
Method

To test this study’s hypotheses, the author employed a pretest-posttest experimental design that was administered via Qualtrics web-based survey software. Data collection through an online survey best fit the parameters of this study because it had the potential to collect large amounts of data efficiently (with less error due to the lack of transferring written data on to a computer), economically (as it requires low human resource efforts while collecting or managing data) and within relatively short time frames (Regmi et al., 2016). To achieve a robust number of respondents, there were 12 separate screenings of the film *Hillbilly*. A survey-embedded experiment in an on-campus environment was the most effective method to collect accurate data that demonstrated whether narrative transportation led to a response or change in viewers’ attitudes toward Appalachian people (Appel et al., 2019). This field experiment allowed the author to create a naturalistic environment to test hypotheses while maintaining external validity. The author secured IRB approval before the experiment and assured the rights and welfare of the human subjects recruited to participate in this research study. Prior to the experiment, the instrument and the stimuli were pilot tested with a convenience sample of WVU students. The pilot test assessed the feasibility of the study and identified any issues with the study design (e.g., stimuli, questionnaire) before launching the larger scale study.

Participants and Sampling

For this research, the sample population was drawn from students at West Virginia University and a convenience sample of 57 students were recruited. Participants were recruited from courses at West Virginia University by their professors through in-class and emailed announcements (See Appendix C). Participants were offered class credit for completion of the
survey, the opportunity to enter a random drawing for one of four $20 Amazon gift cards and food and beverages at the film screening.

**Measurements**

To measure key variables in narrative transportation theory and assess attitudinal shifts, the author conducted a pre and posttest survey-embedded experiment. The pretest measured participant’s attitude toward Appalachian people using specific items from four different semantic differential scales (Jenaro et al., 2018; Morland et al., 1969; Osgood, 1964; Park et al., 2015). It also measured viewers’ perceptions of Appalachian people with a Likert-type scale where “1 = Strongly Disagree and 5 = Strongly Agree” that included negative stereotypical characteristics of Appalachians (See Appendix A). The posttest included all items from the pretest and also included Busselle and Bilandzic’s (2009) Likert-style transportation scale to examine the four dimensions of narrative transportation after viewers watched the documentary film *Hillbilly*.

**Attentional focus**- A total of three statements adapted from Busselle and Bilandzic’s (2009) study indicated what participants thought about during the documentary film. Items included, “I found my mind wandering while the documentary was on,” “While the documentary was on, I found myself thinking about other things,” and "I had a hard time keeping my mind on the documentary.”

**Emotional Engagement**- A total of three statements adapted from Busselle and Bilandzic’s (2009) study indicated how the documentary narrative made participants feel, either feeling the characters’ emotions (empathy), or feeling for them (sympathy). Items included, “The documentary affected me emotionally,” “During the documentary, when a main character
succeeded, I felt happy, and when they suffered in some way, I felt sad,” and “I felt sorry for some of the characters in the documentary.”

**Narrative Understanding**- A total of three statements adapted from Busselle and Bilandzic’s (2009) study indicated how well participants understood the documentary’s narrative. Items included, “At points, I had a hard time making sense of what was going on in the documentary,” “My understanding of the characters was unclear,” and “I had a hard time recognizing the thread of the story.”

**Narrative Presence**- A total of three statements adapted from Busselle and Bilandzic’s (2009) study indicated if participants transitioned from the actual world to the story world in the documentary. Items included, “During the documentary, my body was in the room, but my mind was inside the world created by the story,” “The documentary created a new world, and then that world suddenly disappeared when the documentary ended,” and “At times during the documentary, the story world was closer to me than the real world.”

**Appalachian Stereotypes**- A Likert-type scale containing 11 items indicated the extent to which participants agreed or disagreed with the characterizations of Appalachian people in film. Based on the stereotypes discussed in the literature review (Cooke-Jackson & Hansen, 2008; Massey, 2007), items included, “hillbilly, poor, uneducated, uncivilized, lazy, rednecks, white trash, impoverished, promiscuous, addicts and unhealthy.”

**Attitudes**- A semantic differential scale with a total of 27 adjectives was used to examine participants’ attitudes. From Osgood (1964), the bipolar scales, “Harsh-Mild, Powerless-Powerful, Wild-Tame, Not Impressive-Impressive, Not Nice-Nice, Clumsy-Agile, Disagreeable-Agreeable, Naive-Shrewd, Violent-Calm, Noisy-Quiet, Cowardly-Brave, Rough-Soft and Unstable-Stable” were chosen for this study. From Morland et al. (1969), the
bipolar scales, “Unpleasant-Pleasant, Weak-Strong and Dirty-Clean” were chosen. From Park et al. (2015), “Unhappy-Happy, Unhealthy-Healthy, Shameful-Honorable, Indecent-Refined and Ugly-Beautiful” were chosen. From Jenaro et al. (2018), “Incompetent-Competent, Hostile-Friendly, Bad-Good, Dangerous-Harmless, Resented-Placid and Idle-Worker” were chosen for this study. Not all adjectives were retained. Items that were retained from these studies represented different aspects of culture and for this study, represented perceptions of Appalachians.

Procedure

The *Hillbilly* documentary screening took place on 12 separate days and students chose what day they wanted to participate in the study. Before the screening, participants completed a preliminary questionnaire to identify basic demographic information and their perceptions and attitudes toward Appalachian people (See Appendix A). The pretest was sent along with the sign-up information to students’ emails. In the pretest and posttest, students were asked to enter their WVU ID numbers so the author could identify who attended the screening. When students arrived to participate in the study, they were shown to the screening room where they were asked to watch the documentary film *Hillbilly*, which has a run time of one hour and 27 minutes. A group of participants viewed the documentary on a screen located at the front of the screening room. After watching the film, participants responded to a group-administered questionnaire with statements designed to measure study variables. The posttest questionnaire was administered via a QR code on the screen at the end of the documentary film that participants scanned with their phones in the same room as the stimulus viewing area. After the experiment concluded, the author debriefed the participants.
In order to assure the quality of the data collected, the author also incorporated both manipulation and attention checks in the study instruments. A manipulation check was presented in the posttest to find how participants perceived the manipulation (documentary). For this check, a Likert-type question asked participants to what extent they agreed or disagreed that the purpose of the documentary was to challenge stereotypes of Appalachian people. This manipulation check allowed the author to draw more accurate conclusions related to the relationship between the stimuli and dependent variables. An attention check was also incorporated in this study because if participants were inattentive, the results would be inconclusive or misleading (Campbell & Stanley, 1963). For the attention check, participants were asked to give a particular answer to a simple question in the posttest. The attention check allowed the author to find participants who were not focused on the survey and eliminated them from the study.

**Analysis**

Prior to analyzing the data, the author merged the pretest and posttest datasets then reviewed and cleaned following several steps. The author cleaned the data by removing all respondents who did not complete both the pretest and posttest and all respondents whose WVU ID numbers did not match in both the pretest and posttest. Every participant whose response time fell below -1 sigma was removed (remove $< \bar{x} - \sigma$). The mean was found using ($\bar{x} = \frac{\sum_{i=1}^{n} T}{n}$), and the standard deviation was found by using ($\sigma = \sqrt{\frac{\sum(T-\bar{x})^2}{n}}$). As a further precaution against participants who selected answers without properly reading and considering the questions, the author added a timing question to the posttest. This question was hidden from respondents and tracked the amount of time a respondent spent and clicked on a page.
Individuals who sped through the posttest were identified using the properties of gaussian distributions ($\bar{x} - \sigma$). Participants who had a response time lower than the top 84% average minus the first standard deviation were removed from the data pool. The pretest was not counted for time as the participants completed it outside the testing room, and some took many hours to complete. Responses from outliers, or participants who sped through the study, were deleted. Further, an attention check that was incorporated into the survey ensured that participants responded thoughtfully and if they didn’t, those participants’ responses were eliminated from the study. The attention check was examined, and all responses were correct. Incomplete surveys were also eliminated from the study to prevent skewed results. Five responses from the combined datasets were removed as a result of this analysis. The remaining 57 responses were viable for further analysis.

Before exploring the study research questions and hypotheses, the author created variables using an exploratory factor analysis. In this study, attitude measures are from four different sources, so the author conducted a factor analysis to check the internal consistency of the different dimensions of attitude and evaluated the attitude and stereotype measures to see if they were multidimensional. Using SPSS, the author found groups of items that were highly intercorrelated and each group represented an underlying common factor. For example, one group of items may be representations of feeling or affect and another group may be representations of cognitions. The author then computed variables using SPSS and created summated scales where the response values for individual items were averaged to obtain a total or average score that reflected an individual’s general attitude. After creating the scale, the author tested for reliability using alpha as the measure of reliability. The author also tested the internal consistency of the variables using a threshold of alpha at .70 or greater. The same summated
scale and reliability processes were used for creating the variables associated with narrative transportation. As these scales were derived from the literature and have established internal consistency, a priori assumptions of their theoretical underpinnings were the foundation of the creation of variables.

Prior to analyzing relationships between study variables, the author used descriptive statistics to report means and standard deviations for all of the variables. Reporting pre and posttest means allowed the author to see if there was variance from one variable to the next. Finally, a dependent t-test was used to analyze pre-to-posttest differences in viewers’ perceptions and attitudes after the effect of the intervention on the dependent variable. Results from the dependent t-test allowed the author to make inferences about the relationship between variables and revealed if there was a statistically significant difference in perceptions and attitude (p value). The author also examined which dimension of narrative transportation contributed most to attitudinal shifts using regression analysis.

Findings

Of the 57 respondents, 56% (n= 32) were women and 44% (n= 25) were men. Approximately 89% (n= 51) of respondents were between the ages of 18 and 23, followed by respondents aged 24–43 (11%, n= 6). In terms of race and ethnicity, 91% (n= 52) of respondents self-identified as White or Caucasian; Black or African American respondents, Hispanic or Latino respondents and Asian or Pacific Islander respondents accounted for 9% (n= 5) of respondents. The majority of respondents (84%, n= 48) were juniors, seniors or graduate students and 16% (n= 9) indicated that they were freshman or sophomore students. Approximately 82% (n= 47) of respondents indicated that their parents attended some college, received their bachelor’s degree or received their master’s degree, 11% (n= 6) indicated that their parents
received a professional or a doctorate degree, and 7% (n= 4) indicated that their parents attended
high school or were high school graduates. Approximately 26% (n= 15) of respondents
politically identified as liberal, 53% (n= 30) identified as moderate, 12% (n= 7) identified as
conservative, and the other 9% (n= 5) identified as either very liberal or very conservative. The
majority of respondents (97%, n= 55) had not previously watched the documentary film
_Hillbilly_. Approximately 58% (n= 33) of respondents did not identify as Appalachian and 42%
(n= 24) did identify as Appalachian. Finally, the majority of respondents (96%) are from the
region of Appalachia.

Under the Appalachian Stereotypes Scale, principal component factor analysis revealed
that the indicators load on a single factor. A total of five items were eliminated because they did
not contribute to a simple factor structure and failed to meet a minimum criterion of having a
primary factor loading of .60 or above. The item “Hillbilly” did not load above .60 on any factor.
However, the item “Hillbilly” was kept as a single item indicator and as a dependent variable
because of its significance to the study. The item “Unhealthy” also did not load above .60 on any
factor. “Appalachia is a diverse place” had similar cross loadings between .3 and .7 on all three
factors. “Stereotypical portrayals of Appalachian people are untrue” did not load above .60 on
any factor. Finally, “Appalachians are complex individuals” was eliminated from the study
because it had similar cross loadings and didn’t contribute to the same underlying concept as the
other nine variables in the factor. For the final stage, a principal components factor analysis of
the remaining nine items was conducted, with one factor explaining 57.7% of the variance. All
items in this analysis had primary loadings over .60. The factor loading matrix for this final
solution is presented in Table 1.
For the Perceptions of Appalachians Scale, a principal component factor analysis revealed that the indicators also loaded on one factor. Factor one included 12 indicators that all represented perceptions of the characteristics of Appalachian people. A total of 15 items were eliminated because they also did not contribute to a simple factor structure and failed to meet a minimum criterion of having a primary factor loading of .60 or above. The items “Idle: Worker,” “Resented: Placid,” “Naive: Shrewd,” “Weak: Strong,” “Unhealthy: Healthy,” “Cowardly: Brave,” “Powerless: Powerful,” “Noisy: Quiet,” “Clumsy: Agile,” “Harsh: Mild,” “Violent: Calm” and “Unhappy: Happy” all had similar cross loadings and fell below the .60 threshold. The item “Dirty: Clean” had similar cross loadings. “Wild: Tame” and “Rough: Soft” both were above the .60 threshold at .72, but fell into factor two. For a more pure measure of perceptions and attitude, these two items were eliminated from the study so only one factor remained with the 12 items. For the final stage, a principal components factor analysis of the remaining 12 items was conducted, with one factor explaining 51.7% of the variance. All items in this analysis had primary loadings over .60. The factor loading matrix for this final solution is presented in Table 2.

The author conducted a reliability analysis on the Appalachian Stereotypes Scale and only accepted items that fell between (\(\bar{x} - \sigma^2\) and \(\bar{x} + \sigma^2\)), where (\(\bar{x} - \sigma^2 = 2.13\)) and (\(\bar{x} + \sigma^2 = 3.23\)). The item “Lazy” (\(M = 1.93\)) fell below the desired range and was eliminated from the study. After deleting this item, Cronbach’s alpha was .898 and there were eight remaining items. After conducting a reliability analysis on the Perceptions of Appalachians Scale, and only accepting items that fell between or were close enough to (\(\bar{x} - \sigma^2 = 3.41\)) and (\(\bar{x} + \sigma^2 = 3.78\)), the items “Not Nice: Nice” (\(M = 4.06\)) and “Indecent: Refined” (\(M = 3.01\)) were eliminated from the study. The remaining 10 items made Cronbach’s alpha .903, exceeding the generally accepted .70 standard
for internal consistency for survey measures (Nunnaly, 1978). The author then computed the two variables using SPSS. A reliability analysis was also conducted for the four dimensions of narrative transportation. In the narrative understanding dimension, reliability measures were within the accepted range (\(M = 1.52, SD = .002\)) and Cronbach’s alpha was .730. Attentional focus reliability measures also were within the accepted range (\(M = 1.99, SD = .011\)) with Cronbach’s alpha being .929. While means fell between the accepted range for the emotional engagement dimension (\(M = 3.93, SD = .010\)), Cronbach’s alpha was low at .589. Finally, in the narrative presence dimension, all items fell within the desired range (\(M = 3.34, SD = .050\)), but Cronbach’s alpha was low at .675.

Table 1

*Factor loadings and communalities based on a principal components analysis for eight items from the Appalachian Stereotypes Scale (N = 57)*

<table>
<thead>
<tr>
<th>Component Matrix</th>
<th>Appalachian Stereotypes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>Poor</td>
<td>.788</td>
</tr>
<tr>
<td>Uneducated</td>
<td>.847</td>
</tr>
<tr>
<td>Uncivilized</td>
<td>.809</td>
</tr>
<tr>
<td>Rednecks</td>
<td>.778</td>
</tr>
<tr>
<td>White trash</td>
<td>.820</td>
</tr>
<tr>
<td>Impoverished</td>
<td>.717</td>
</tr>
<tr>
<td>Promiscuous</td>
<td>.652</td>
</tr>
<tr>
<td>Addicts</td>
<td>.684</td>
</tr>
</tbody>
</table>

*Extraction Method: Principal Component Analysis.*

a. 1 components extracted.
Table 2

Factor loadings and communalities based on a principal components analysis for ten items from the Perceptions of Appalachians Scale (N = 57)

Component Matrix*

<table>
<thead>
<tr>
<th></th>
<th>Perceptions of Appalachians</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Not Impressive: Impressive</td>
<td>.745</td>
</tr>
<tr>
<td>Disagreeable: Agreeable</td>
<td>.692</td>
</tr>
<tr>
<td>Unpleasant: Pleasant</td>
<td>.816</td>
</tr>
<tr>
<td>Unstable: Stable</td>
<td>.656</td>
</tr>
<tr>
<td>Shameful: Honorable</td>
<td>.730</td>
</tr>
<tr>
<td>Ugly: Beautiful</td>
<td>.661</td>
</tr>
<tr>
<td>Incompetent: Competent</td>
<td>.746</td>
</tr>
<tr>
<td>Hostile: Friendly</td>
<td>.775</td>
</tr>
<tr>
<td>Bad: Good</td>
<td>.744</td>
</tr>
<tr>
<td>Dangerous: Harmless</td>
<td>.741</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.*

a. 1 components extracted.

The author ran a t-test for the Appalachian Stereotypes Scale and the Perceptions of Appalachians Scale to examine if there was a significant difference from the pretest to posttest.

Findings indicate there was a significant difference in perceptions related to stereotypes of Appalachians after watching the documentary $t(112) = 2.92, p < .05$. The results from the pretest ($M = 2.99, SD = .86$) and posttest ($M = 2.56, SD = .70$) indicate that after watching the documentary film, participants showed a significant difference in a stereotypical view of Appalachian people. The results from the Perceptions of Appalachians Scale pretest ($M = 3.32, SD = .67$) and posttest ($M = 3.89, SD = .62$) indicate that there was a significant difference in attitude toward Appalachian people after watching the documentary, $t(112) = 4.73, p < .05$.

Finally, findings indicate there was a significant difference from the pretest ($M = 3.14, SD = ...
to the posttest \( (M = 3.68, SD = 1.12) \) in perceptions of the word hillbilly and that characterization for Appalachian people \( t(112) = 2.52, p < .05 \).

Multiple regression analyses were conducted to examine the best narrative transportation dimension or predictors (narrative understanding, attentional focus, emotional engagement and narrative presence) of each dependent variable (Appalachian Stereotypes Scale, Perceptions of Appalachians Scale and Hillbilly). The means, standard deviations and intercorrelations for perceived stereotypes of Appalachians can be found in Table 3. The combination of variables to predict perceived stereotypes of Appalachians after engaging in narrative understanding, attentional focus, emotional engagement and narrative presence was not significant, \( F(4, 52) = .462, p = .76 \). The adjusted \( R^2 \) value was .04. This indicates that 4% of the variance in portrayals of Appalachians was explained by the model. According to Cohen (1988), this is a small effect.

**Table 3**

*Appalachian Stereotypes Multiple Regression Analysis Summary for narrative understanding, attentional focus, emotional engagement and narrative presence (N = 57)*

<table>
<thead>
<tr>
<th>Coefficients*</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>2.144</td>
<td>.830</td>
</tr>
<tr>
<td>Narrative Understanding</td>
<td>-.131</td>
<td>.165</td>
</tr>
<tr>
<td>Attentional Focus</td>
<td>.134</td>
<td>.129</td>
</tr>
<tr>
<td>Emotional Engagement</td>
<td>-.035</td>
<td>.183</td>
</tr>
<tr>
<td>Narrative Presence</td>
<td>.147</td>
<td>.148</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Appalachian Stereotypes Scale
Regression was also run on perceptions of Appalachians, and the means, standard deviations and intercorrelations for this model can be found in Table 4. The combination of variables to predict perceptions of the characteristics of Appalachians after engaging in the four narrative transportation dimensions was significant, $F(4, 52) = 2.97, p < .05$. Narrative presence significantly predicts perceptions of Appalachians when all four variables are included. The adjusted $R^2$ value was .12 which indicates that 12% of the variance in perceptions of Appalachian people was explained by the model. According to Cohen (1988), this is also a small effect.

**Table 4**

*Perceptions of Appalachians Multiple Regression Analysis Summary for narrative understanding, attentional focus, emotional engagement and narrative presence (N = 57)*

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>2.285</td>
<td>.678</td>
</tr>
<tr>
<td>Narrative Understanding</td>
<td>-.053</td>
<td>.134</td>
</tr>
<tr>
<td>Attentional Focus</td>
<td>.067</td>
<td>.105</td>
</tr>
<tr>
<td>Emotional Engagement</td>
<td>.184</td>
<td>.150</td>
</tr>
<tr>
<td><strong>Narrative Presence</strong></td>
<td><strong>.250</strong></td>
<td><strong>.121</strong></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Perceptions of Appalachians Scale

Finally, regression was run on the perception of the meaning of hillbilly and the means, standard deviations and intercorrelations for this model can be found in Table 5. The combination of variables to predict perceptions of the meaning of hillbilly after engaging in the four narrative transportation dimensions was not statistically significant, $F(4, 52) = .72, p = .58$. The adjusted $R^2$ value was .02 which indicates that 2% of the variance in perceptions of the
The meaning of hillbilly was explained by the model. According to Cohen (1988), this is a small effect.

**Table 5**

*Hillbilly Multiple Regression Analysis Summary for narrative understanding, attentional focus, emotional engagement and narrative presence (N = 57)*

<table>
<thead>
<tr>
<th>Coefficients*</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>1.569</td>
<td>1.323</td>
</tr>
<tr>
<td>Narrave Understanding</td>
<td>.052</td>
<td>.262</td>
</tr>
<tr>
<td>Attentinal Focus</td>
<td>.197</td>
<td>.206</td>
</tr>
<tr>
<td>Emotiona Engagement</td>
<td>.393</td>
<td>.292</td>
</tr>
<tr>
<td>Narrative Presence</td>
<td>.032</td>
<td>.237</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Hillbilly

The first research question (RQ1) sought to determine which dimension of narrative transportation was most effective in shifting viewers’ attitudes toward Appalachian people, (as measured by the new composite scale Perceptions of Appalachians). As shown in Table 4, narrative presence contributed the most significantly to this shift in viewers’ attitudes. Based on the narrative transportation literature, the author also posited that increased narrative transportation in the form of narrative understanding (RH1a), attentional focus (RH1b), emotional engagement (RH1c), and narrative presence (RH1d), would lead to narrative persuasion determined by attitude change. As seen in Table 4, this hypothesis was partially supported. The regression analysis suggests that narrative transportation dimensions were not significant predictors of attitude change in participants after they viewed the documentary film. The only significant predictor of attitude shift was narrative presence.
Discussion

Research has shown that narrative transportation and film narratives change viewers’ attitudes (Green & Brock, 2000; Harris, 2002; Kubrak, 2020; Pressgrove & Bowmen, 2019) and can lead viewers to form new opinions consistent with those in the particular film. Many of these studies focused on fictional visual narratives. Documentary films are different with the intention to educate and present a creative treatment of actuality (Plantinga, 2005). The Hillbilly documentary challenged viewers to see Appalachians for who they truly were, and to reevaluate the characterizations that they thought negatively defined them. Based on this work, the author examined narrative transportation in a new context and provided a new way to assess the outcome measure of attitude in the context of Appalachian documentary film. While this study used a commonly employed narrative transportation scale from Busselle and Bilandzic (2009), the author also drew scales from numerous disparate fields to comprise the Appalachian Stereotypes Scale and Perceptions of Appalachians Scale. This new approach to assessing attitudinal change provides one of several ways that this thesis advances theory around how media-against-media documentaries can be used to overcome audience biases.

Theoretical Implications

The author identified three different dimensions to assess the ways in which documentaries can impact perceptions, whether they were assessments of attitudes toward Appalachian people or assessments of how people are stereotypically perceived. There were significant differences pretest to posttest for all three scales created in this study (Appalachian Stereotypes Scale, Perceptions of Appalachians Scale and Hillbilly Scale). These differences proved that a documentary had the power to reorient audience perceptions and persuade participants enough to change their initial attitudes. Scholars seeking to further explore a
The documentary’s impact on audiences’ perceptions toward individuals in a documentary film can use these measures to further understand how cognitions are changed based on this storytelling format.

By using a pretest/posttest experiment, the author tested the utility of narrative transportation theory in the context of a media-against-media film which challenged stereotypical Appalachian misconceptions. Previous studies have indicated that narrative transportation does lead to attitude shifts in viewers after being immersed in a narrative (Bezdek & Gerrig, 2017; Busselle & Bilandzic, 2009; Fazio & Zanna, 1981; Green & Brock, 2000; Green & Clark, 2013). However, findings from this study indicate that narrative transportation may not be the best measure to identify what leads to a change in viewers’ perceptions of people after watching a documentary film. In fact, the narrative presence dimension of the narrative transportation model was shown to be the only significant dimension in shifting viewers’ attitudes and perceptions of Appalachian people.

In the context of this study, narrative presence was defined as the extent to which a viewer feels as though they have entered into the narrative world of the documentary. Literature indicates that narratives can change attitudes through increased presence in the environment shown on-screen (Li et al., 2002; Lombard & Ditton, 1997; Steuer, 1992). This narrative transportation dimension was the most effective in shifting viewers’ attitudes possibly because the documentary presented a captivating environment and storyline on screen. It is also possible that because study participants are currently living in Appalachia, they have a stronger sense of presence in the region. That sense of presence in Appalachia may have led participants to feel more connected with the region and to therefore relate more to the characters, storyline and places on screen. While it’s not clear why the other narrative transportation dimensions weren’t
effective in this study, reception theory tells us that audiences receive and interpret narratives in their own ways, so this theory could possibly be used as a control in future research to examine if these dimensions of narrative transportation are better explained.

Documentaries often require a more cognitive presence and deeper contemplation from their audiences instead of a total disconnection and immersion into the narrative, which may help to explain the findings. For example, documentaries often attempt to combine educational content with a surrounding narrative, which is called a hybrid media presentation. While processing the narrative of a hybrid media presentation, recipients are assumed to pay less attention to other information that is less relevant to the development of the narrative (Fisch, 2000). Therefore, educational contents which are closely linked to the narrative plotline should be learned better than educational contents that are distant to the narrative plotline, which is a phenomenon that Fisch (2000) terms the narrative distance effect (Glaser et al., 2012). Because narrative transportation is more likely to occur with a film narrative displaying an unfolding chain of events, reports of transportation can be considered a second indicator for narrative processing of hybrid media presentations like *Hillbilly* (Glaser et al., 2012). Therefore, scholars seeking to further explore narrative transportation theory as part of attitudinal shifts in viewers after being immersed in a hybrid media documentary narrative would be advised to explore the narrative distance effect and add a cognition dimension to the study measures.

**Practical Implications**

Findings from this study provide practical insights as well. These include insights into why narrative transportation dimensions failed to shift viewers’ attitudes in the context of documentary film and how documentaries can be used in the future to effectively change audience perceptions, possibly for advocacy purposes. First, findings indicate that the three
dimensions of narrative transportation (narrative understanding, attentional focus and emotional engagement), did not lead to changes in viewers' perceptions of Appalachian people from the Perceptions of Appalachians Scale. This may be because documentaries offer audiences a more hybrid narrative of plotline and educational contents closer to our own reality. Because documentaries address the world in which we live rather than a world imagined by the filmmaker, they differ from the various genres of fiction (science fiction, horror, adventure, drama) in significant ways (Nichols, 2017).

Documentaries prompt different expectations from audiences. While it’s important to balance reality with drama, nonfiction films that grab and hold audiences the most are ones that run like movies. Like fictional narratives, these films may emphasize character, conflict, rising stakes, a dramatic arc and resolution. They bring viewers on a journey, immerse them in new worlds and explore universal themes (Bernard, 2010). These documentaries and nonfiction films compel viewers to consider and care about topics and subjects they might previously have overlooked. Therefore, documentarians utilizing a media-against-media approach to change audience perceptions about a group of people, should consider how significant the plotline and cinematic elements are in audiences’ retention of educational information. The narrative transportation dimensions used in this study have been shown to shift attitudes when audiences are experiencing a narrative of fiction and drama (Busselle & Bilandzic, 2009), but not shift attitudes in the context of an Appalachian documentary film because of its hybrid design. Rubin and York presented a storyline that was interwoven with education, and they succeeded in shifting viewers' perceptions of Appalachians. Documentarians can use this same media-against-media approach to shift viewers' attitudes, while also considering the benefits of holding educational aspects of the narrative close to the storyline.
Documentarians and advocacy groups can also use media-against-media narratives in documentary film to overcome stereotypes and change the way audiences perceive specific communities. Documentary filmmakers often identify themselves as creative artists for whom ethical behavior is at the core of their projects (Nisbet & Aufderheide, 2009). While ethicality is the foundation, persuasion is the purpose. One powerful element that can lead to persuasion in film is the musical score, which enables films to reach large audiences and emotionally influence the subconscious (Gunn & Hall, 2008). Film scores are powerful because they “encourage viewers to use the associations between the songs and their own personal histories” (Armstrong, 2008, p. 74). Combining elements like a powerful musical score with a media-against-media approach leads to greater persuasion in viewers.

This research supported that a media-against-media approach successfully shifts audience perceptions, and the author encourages filmmakers to use this approach in other contexts such as social justice, climate change and equity work. As an illustration, the documentary Years of Living Dangerously, which is about the climate crisis and how it personally affects people around the world, advocates for viewer attitude change. In a study conducted by Bieniek-Tobasco et al. (2019), they evaluated the effects of a mass media climate change program on audiences’ efficacy beliefs, outcome expectations, emotional responses, and motivations and intentions to address climate change. In the future, documentarians could include counter arguments in the media that climate change does not exist, for example, to further accentuate the narrative’s argument and change audience perceptions. Similarly, another documentary that advocates for attitude change is 13th, which highlights how incarceration began as a way for the South to continue to have free labor and how this led to the targeting of black people for any minor crime (Tisdale, 2020). Filmmakers can reference counter arguments in the media here as well to further
drive the narrative’s argument. This study helps grow understanding of the power of documentary film and provides a broader context into how a media-against-media approach can effectively challenge stereotypes and shift the way audiences perceive certain communities.

Limitations and Future Research

Although this study offers numerous theoretical and practical implications, like all research, this study has its limitations. First, this study had a convenience sample of specifically WVU students, or people in central Appalachia, so replication efforts might target a broader sampling frame beyond a sample of university students. Additionally, the lack of variance in respondent demographics was anticipated due to location of the study. The majority of respondents were Caucasian (91%, n= 52), therefore, the author encourages future research to study a more diverse sampling frame. This study also initially intended to have 100 participants, but only received 57 participants. Future research should have more participants included in the study. As the first study to use attitude measures from the fields of psychology, health sciences, anthropology and sociology as a dependent variable, future work could assess the construct validity and psychometric properties through scale development and the use of more advanced statistics such as confirmatory factor analysis. Future studies may also expand research on attitudes and stereotypes relative to participants’ perception of place and people in the place.

A field experiment allowed the author to quantitatively test viewer attitude shifts in an on-campus environment. In the context of this study, the quantitative experiment provided numerical data to test hypotheses and explore relationships between variables. Future research might explore a documentary’s ability to immerse viewers and shift their attitudes using a qualitative approach, which could give the researcher more insight into participants personal feelings towards the film and its characters. Findings from this study indicated that the
quantitative measures of narrative transportation were not effective in shifting viewers' attitudes of Appalachian people after watching the documentary film. Therefore, a qualitative study may be more effective in future research and provide further reasoning as to what truly caused a shift in viewer’s attitudes after watching a documentary film. Some qualitative approaches could be focus group studies, ethnographies, face-to-face interviews or surveys where participants write out their perceptions of people and places in the film. Replication and extension both quantitatively and qualitatively should be useful in providing empirical evidence of how viewers shift their attitudes based on their immersion into different types of media-against-media narratives.

Despite this study’s limitations, it is important to acknowledge that this is the first study that examines how narrative transportation theory affects viewers’ perceptions of Appalachian people after watching a media-against-media documentary film, as well as the first to create scales and outcome variables that assess attitudes toward Appalachian people and assess how Appalachians are stereotypically perceived. Findings and measures in this study advance the understanding of narrative transportation theory in a documentary film context and provide a framework for future exploration.

**Conclusion**

This study introduced three new scales to measure attitudinal change and proved that the media-against-media documentary film *Hillbilly* did shift viewers’ perceptions of Appalachian people. Research has demonstrated that the experience of narrative transportation has the power to change individuals’ attitudes after being immersed in a visual narrative. However, while research from this study did suggest that viewers changed their perceptions of Appalachian people after watching the documentary film, narrative transportation was not the driving force in
this shift. Documentaries generally appear in a hybrid format of storyline and education, leading
viewers to feel less immersion. Based on findings from this study, documentarians are advised to
use a media-against-media approach to change audience perceptions and interweave education
within the storyline to strengthen the film’s argument. This study offers significant advances in
the field of media and provides a framework for future research to explore audience immersion
into documentary film and the power it has to change audience perceptions.
References

doi:10.1080/15213261003799847


https://doi.org/10.1080/09502360701842033

doi:10.1075/ni.24.2.07bae


https://doi-org.wvu.idm.oclc.org/10.1080/15213269.2015.1121830


https://doi.org/10.1016/j.socscimed.2010.02.038


https://doi.org/10.5810/kentucky/9780813125237.001.0001


https://doi.org/10.1080/00913367.2004.10639163


https://doi.org/10.1086/510216


https://doi.org/10.1207/S1532785XMEP0201_4


https://doi.org/10.11144/Javeriana.upsy17-4.usdt


https://doi.org/10.1080/10810730.2013.768730


https://doi-org.wvu.idm.oclc.org/10.1080/01463373.2013.799510


https://doi.org/10.2307/2575474


https://doi.org/10.1080/15205430903276863


https://doi-org.wvu.idm.oclc.org/10.1007/s11199-007-9344-8


Appendix A: Consent Form and Pretest Questionnaire

Start of Block: Introduction

Q1 We're excited that you've shown interest in our project. The study is being conducted by researchers at West Virginia University. The purpose of this research is to better understand narrative transportation and attitude shifts in individuals after watching the Appalachian documentary film Hillbilly.

CONSENT Before you begin, please read the information below and indicate whether you agree to participate in this study.

Introduction This study is being conducted by researchers at West Virginia University.

Purpose(s) of the Study The purpose of this study is to better understand narrative transportation and attitudinal shifts in individuals after watching the Appalachian documentary film Hillbilly.

Description of Procedures This study involves answering questions about your opinions concerning dimensions of narrative transportation. The total amount of time for participation in this study is estimated at one hour and 40 minutes.

Discomforts There are no known or expected risks from participating in this study.

Benefits & Financial Considerations You may receive class credit by participating in this study and there is no fee for participation. The knowledge gained from this study may eventually benefit others, such as corporate communicators and educators.

Confidentiality Any information about you that is obtained as a result of your participation in this research will be kept as confidential as legally possible. In any publications that result from this research, neither your name nor any information from which you might be identified will be published without your consent.

Voluntary Participation Participation in this study is voluntary. You are free to withdraw your consent to participate in this study at any time.

For additional information regarding your rights as a research subject, to discuss problems, concerns, or suggestions related to the research, to obtain information or offer input about the research, contact the Office of Research Integrity & Compliance at (304) 293-7073. By proceeding you are indicating that you have read this statement and agree to participate in this study.

End of Block: Introduction

Start of Block: ID Number

Q2 Please enter the last six digits of your WVU ID number below.

________________________________________________________________
Q3 **Please indicate your gender.**
- Female (1)
- Male (2)
- Transgender female (3)
- Transgender male (4)
- Non-binary/ non-conforming (5)
- Prefer not to say (6)

Q4 **How would you classify yourself (check all that apply)?**
- Native American (1)
- Asian / Pacific Islander (2)
- Black / African American (3)
- Hispanic / Latino (4)
- Middle Eastern (5)
- White / Caucasian (6)
- Other (7)

Q5 **What is your age?**

________________________________________________________________

Q6 **What is your grade?**
- Freshman (1)
- Sophomore (2)
- Junior (3)
- Senior (4)
- Graduate Student (5)
- Four-year college degree / B.A. / B.S. (6)
Q7 What is the highest level of education your parents have completed?
   o Some high school (1)
   o High school graduate (2)
   o Some college (3)
   o Bachelor's degree (4)
   o Master's degree (5)
   o Professional degree (6)
   o Doctorate (7)
   o Prefer not to say (8)

Q8 Please select the label that best describes your political point of view.
   o Very liberal (1)
   o Liberal (2)
   o Moderate (3)
   o Conservative (4)
   o Very conservative (5)

Q9 Please indicate the zip code of your permanent address.

End of Block: Demographics

Start of Block: Appalachian documentary film pretest

Thank you for agreeing to participate in this survey. Before answering the following questions, understand that Appalachia is defined as a cultural region in the Eastern United States from southern New York to Northern Mississippi. The region includes all of West Virginia and 12 other states including parts of: Alabama, Georgia, Kentucky, Maryland, Mississippi, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee and Virginia.

Q10 Have you ever watched the documentary film Hillbilly?
   o Yes (1)
   o No (2)
Q11 Do you identify as an Appalachian person?
   o Yes (1)
   o No (2)
   o Prefer not to say (3)

Q12 How would you identify an Appalachian person?
________________________________________________________________________

Q13 Please indicate the extent to which you agree or disagree with the following statement. If you do not identify as Appalachian, answer N/A.

<table>
<thead>
<tr>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Neutral (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
<th>N/A (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am proud to be Appalachian. (1)</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Q14 Describe how you have seen Appalachia or Appalachian people portrayed in film.
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Q15 Many films portray Appalachian people based on specific characteristics or traits. Listed below are some of the most common traits. Please identify how accurate you think these portrayals are by indicating your level of agreement with the adjectives used to describe Appalachians.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Neutral (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hillbilly (1)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Poor (2)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Uneducated (3)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Uncivilized (4)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Lazy (5)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Rednecks (6)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>White trash (7)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Impoverished (8)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Promiscuous (9)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Addicts (10)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
Q16 Please indicate the extent to which you agree or disagree with the following statements.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Neutral (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appalachia is a diverse place. (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stereotypical portrayals of Appalachian people are untrue. (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appalachians are complex individuals. (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q17 For the next few blocks of questions you will be presented with a series of adjectives. For each, you will be asked to choose the point on the scale that best reflects your perception of Appalachian people.

<table>
<thead>
<tr>
<th>Adjectives</th>
<th>1 (1)</th>
<th>2 (2)</th>
<th>3 (3)</th>
<th>4 (4)</th>
<th>5 (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harsh</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powerless</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wild</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Impressive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mild</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Powerful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tame</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impressive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q18 For the following items, please select the point between the two adjectives that best represents your perception of Appalachian people.

<table>
<thead>
<tr>
<th></th>
<th>1 (1)</th>
<th>2 (2)</th>
<th>3 (3)</th>
<th>4 (4)</th>
<th>5 (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Nice</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Clumsy</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Cowardly</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Noisy</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Violent</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Naive</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Disagreeable</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Q19 For the following items, please select the point between the two adjectives that best represents your perception of Appalachian people.

<table>
<thead>
<tr>
<th></th>
<th>1 (1)</th>
<th>2 (2)</th>
<th>3 (3)</th>
<th>4 (4)</th>
<th>5 (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unpleasant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weak</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dirty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unstable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rough</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q20 For the following items, please select the point between the two adjectives that best represents your perception of Appalachian people.

<table>
<thead>
<tr>
<th></th>
<th>1 (1)</th>
<th>2 (2)</th>
<th>3 (3)</th>
<th>4 (4)</th>
<th>5 (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unhappy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unhealthy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shameful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indecent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ugly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q21 For the following items, please select the point between the two adjectives that best represents your perception of Appalachian people.

<table>
<thead>
<tr>
<th></th>
<th>1 (1)</th>
<th>2 (2)</th>
<th>3 (3)</th>
<th>4 (4)</th>
<th>5 (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incompetent</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Hostile</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Bad</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Dangerous</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Resented</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Idle</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>

Competent
Friendly
Good
Harmless
Placid
Worker

---

Appendix B: Posttest Questionnaire

Start of Block: Introduction

Thank you for your participation in this study. Please answer the following questions regarding the film you just watched and your perceptions related to the people of Appalachia. The estimated time for this survey is five minutes.

End of Block: Introduction

Start of Block: ID Number

Q22 Please enter the last six digits of your WVU ID number below.
### Q23 Please indicate the extent to which you agree or disagree with the following statement.

<table>
<thead>
<tr>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Neutral (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The purpose of this documentary is to challenge stereotypes of Appalachia. (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Narrative Understanding

### Q24 Please indicate the extent to which you agree or disagree with the following statements.

<table>
<thead>
<tr>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Neutral (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>At points, I had a hard time making sense of what was going on in the documentary. (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My understanding of the characters was unclear. (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I had a hard time recognizing the thread of the story. (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Attentional Focus**

Q25 *Please indicate the extent to which you agree or disagree with the following statements.*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Neutral (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I found my mind wandering while the documentary was on. (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>While the documentary was on, I found myself thinking about other things. (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I had a hard time keeping my mind on the documentary. (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Emotional Engagement

Q26 Please indicate the extent to which you agree or disagree with the following statements.

<table>
<thead>
<tr>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Neutral (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The documentary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>affected me</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>emotionally. (1)</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

| During the documentary, when a main character succeeded, I felt happy, and when they suffered in some way, I felt sad. (2) | O | O | O | O |
| I felt sorry for some of the characters in the documentary. (3) | O | O | O | O |
**Narrative Presence**

Q27 Please indicate the extent to which you agree or disagree with the following statements.

<table>
<thead>
<tr>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Neutral (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>During the documentary, my body was in the room, but my mind was inside the world created by the story. (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The documentary created a new world, and then that world suddenly disappeared when the documentary ended. (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At times during the documentary, the story world was closer to me than the real world. (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

End of Block: Likert scale of variables in narrative transportation

Start of Block: Stereotype perception measure
Many films portray Appalachian people based on specific characteristics or traits. Listed below are some of the most common traits. Please identify how accurate you think these portrayals are by indicating your level of agreement with the adjectives used to describe Appalachians.

<table>
<thead>
<tr>
<th>Trait</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Neutral (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hillbilly (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uneducated (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncivilized (4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lazy (5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rednecks (6)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White trash (7)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impoverished (8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promiscuous (9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Addicts (10)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q29 Please indicate the extent to which you agree or disagree with the following statements.

<table>
<thead>
<tr>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Neutral (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appalachia is a diverse place. (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stereotypical portrayals of Appalachian people are untrue. (2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appalachians are complex individuals. (3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

End of Block: Stereotype perception measure

Start of Block: Attention check

Q30 What is the name of the film you watched? Select Hillbilly as your answer.
   o Hillbilly (1)
   o The Appalachians (2)

End of Block: Attention check
**Start of Block: Attitude measure**

**Q31** For the next few blocks of questions you will be presented with a series of adjectives. For each, you will be asked to choose the point on the scale that best reflects your perception of Appalachian people.

<table>
<thead>
<tr>
<th></th>
<th>1 (1)</th>
<th>2 (2)</th>
<th>3 (3)</th>
<th>4 (4)</th>
<th>5 (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harsh</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Powerless</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wild</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Not Impressive</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Nice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clumsy</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

**Q32** For the following items, please select the point between the two adjectives that best represents your perception of Appalachian people.

<table>
<thead>
<tr>
<th></th>
<th>1 (1)</th>
<th>2 (2)</th>
<th>3 (3)</th>
<th>4 (4)</th>
<th>5 (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cowardly</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Noisy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violent</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

Mild
Powerful
Tame
Impressive
Nice
Agile
Brave
Quiet
Calm
Q33 For the following items, please select the point between the two adjectives that best represents your perception of Appalachian people.

<table>
<thead>
<tr>
<th>Adjective</th>
<th>1 (1)</th>
<th>2 (2)</th>
<th>3 (3)</th>
<th>4 (4)</th>
<th>5 (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naive</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Disagreeable</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Shrewd</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Agreeable</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Q34 For the following items, please select the point between the two adjectives that best represents your perception of Appalachian people.

<table>
<thead>
<tr>
<th>Adjective</th>
<th>1 (1)</th>
<th>2 (2)</th>
<th>3 (3)</th>
<th>4 (4)</th>
<th>5 (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unpleasant</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Weak</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Dirty</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unstable</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Rough</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pleasant</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Strong</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Clean</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Stable</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Soft</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adjective</th>
<th>1 (1)</th>
<th>2 (2)</th>
<th>3 (3)</th>
<th>4 (4)</th>
<th>5 (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unhappy</td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Unhealthy</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Happy</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Healthy</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Q35 For the following items, please select the point between the two adjectives that best represents your perception of Appalachian people.

<table>
<thead>
<tr>
<th>Item</th>
<th>1 (1)</th>
<th>2 (2)</th>
<th>3 (3)</th>
<th>4 (4)</th>
<th>5 (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shameful</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Indecent</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>Ugly</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>
| Incompetent   | O     | O     | O     | O     | O     | Competent  
| Hostile       | O     | O     | O     | O     | O     | Friendly   
| Bad           | O     | O     | O     | O     | O     | Good       
| Dangerous     | O     | O     | O     | O     | O     | Harmless   
| Resented      | O     | O     | O     | O     | O     | Placid     
| Idle          | O     | O     | O     | O     | O     | Worker     

End of Block: Attitude measure
Start of Block: Class credit
Q36 If you are participating in this study for extra credit, please provide your information below. If not, please click the advance key to submit your responses.

Q37 Full name

________________________________________________________________

Q38 Your mix email

________________________________________________________________

Q39 Your professor

________________________________________________________________

End of Block: Class credit

Start of Block: Debrief

Q40 Thank you for participating in this study. The purpose of this study was to explore the extent to which you experienced narrative transportation, which can lead to narrative persuasion in the form of attitudinal shifts that reflect the film narrative. More specifically, the purpose of this research is to understand the way audiences experience narrative transportation in the documentary film *Hillbilly* and how that transportation affects your attitudes toward Appalachia and Appalachian people.

End of Block: Debrief
Appendix C: Recruitment Email

Dear Prospective Participant,

This letter is a request for you to participate in a research project that’s aim is to better understand narrative transportation and attitude shifts in individuals after watching the Appalachian documentary film Hillbilly. This project is being conducted by Alayna Fuller in the Reed College of Media at WVU under the supervision of Dr. Geah Pressgrove, an associate professor of advertising and public relations in the Reed College of Media, to fulfill requirements for a Master's Degree in Journalism.

If you decide to participate, you will be asked to take an online survey where you will indicate your demographic information and how you have seen Appalachian people represented in film. You will then be asked to attend a screening in the WVU Media Innovation Center, where you will watch the film. After watching the film, you will be asked to take a post-test questionnaire. Your participation in this project will take approximately one hour and 40 minutes. You must be 18 years of age or older to participate. If you participate in this study, you will be entered into a random drawing for one of four $20 Amazon gift cards. You may also be eligible to receive class credit for participation in this study- please consult with your syllabus and instructor for details.

Your involvement in this project is anonymous. All data will be reported in the aggregate. You will not be asked any questions that could lead back to your identity as a participant. Your participation is entirely voluntary. You may skip any question that you do not wish to answer, and you may stop participating at any time. Your class standing will not be affected if you decide not to participate or withdraw. The West Virginia University Institutional Review Board's approval of this project is on file with the WVU Office of Human Research Protections.

If you wish to participate in this study, please visit this link to fill out the initial survey: https://wvu.qualtrics.com/jfe/form/SV_8vto2fQMG91xjFQ

If you have any questions about this research project, please feel free to contact me at 304-709-1950 or by email at agf0006@mix.wvu.edu. Additionally, you can contact the WVU Office of Human Research Protections at 304-293-7073.

I hope that you will participate in this research project, as it could help us better understand narrative transportation and attitude shifts in individuals after watching a documentary film that challenges how Appalachian people have been portrayed on screen for decades. Thank you for your time and consideration.

Sincerely, Alayna Fuller