*Ohio Communication Journal*
Volume 58 – March 2020 pp. 68-90

# Legislating Ohio's Crisis: Using the Third-Person Effect Hypothesis to Ascertain Ohioans' Attitudes Toward [Decriminalizing] Drug Addiction and Issue 1

Audrey E. Wagstaff
Casey L. Hess
Carley G. Wilson

*News reports suggest that Ohio leads the nation in drug abuse and is ranked in the top 5 states for populations with addiction challenges (Centers for Disease Control, 2018). While many efforts have been made to help combat addiction issues and the opiate epidemic, an ongoing debate about effective treatment and rehabilitation has ensued. This debate heated up in the fall of 2018 when Ohioans faced Issue 1, a proposed constitutional amendment that would have reduced penalties for drug offenders. In this study, we aimed to use Davison's (1983) Third-Person Effect Hypothesis as a theoretical lens to examine perceptions of media coverage of Issue 1, attitudes toward Issue 1, and other factors that contributed to Ohioans' vote on the Issue. Our findings suggest that there are applications for the Third-Person Effect Hypothesis, and that these include perceptual biases and behavioral effects that extend beyond reactions to purely media content. In fact, our respondents not only indicated third-person perceptual biases toward media coverage of/in support for Issue 1, but also exhibited these biases toward a hypothetical passage of the issue. We found that the more perceptual bias respondents indicated for Issue 1 passing when considering the impact on their friends/relatives, the more likely they were to have cast a "no" vote.*

## Introduction

News reports suggest that Ohio leads the nation in drug abuse and is ranked in the top 5 states for populations with addiction challenges (Centers for Disease Control, 2018). In a 2017 report, the CDC ranked Ohio second in overdose deaths behind West Virginia. The National Center for Health Statistics reported that Ohio's rate of overdose deaths grew 41% from 2016-2017. In 2016, unintentional drug overdoses caused the deaths of 4,050 Ohioans, a 32.8 percent increase from 2015. According to a *Dayton Daily News* report, Montgomery County has the highest rate per capita of overdose deaths, followed by Fayette, Clark, and Clinton (Wedell, 2018). Southwest Ohio could be described as "ground zero" in the drug abuse epidemic.

While many efforts have been made to help combat addiction issues and the opiate epidemic, an ongoing debate about effective treatment and the criminalizing of addiction has endured. Proposed alternatives to criminalizing – and thereby incarcerating – drug users have included required treatments programs including "drug courts." In November 2018, Ohioans faced another alternative, a ballot initiative entitled Issue 1, which included a reduction in [criminal] penalties for drug offenders. Issue 1 failed, with 63% of voters rejecting it. Nevertheless, the initiative and its supporters helped raised many questions about Ohioans' attitudes toward drug addiction, how theory can help to describe how these attitudes are shaped, and how Ohioans [including those living in "ground zero"] perceive initiatives to treat addiction?

**Audrey E. Wagstaff** (Ph.D., Kent State University; MJE, Journalism Education Association) is an Associate Professor of Communication Arts and Sciences at Wilmington College (Ohio). Address correspondence to the first author at audrey_wagstaff@wilmington.edu.
**Casey L. Hess** (MSW, Miami University (Ohio)) LSW is a counselor at Companions on a Journey.
**Carley G. Wilson** (A.B., Wilmington College) is an Outreach Specialist at the Wounded Warrior Project.

## Literature Review

### Drug Use and Addiction

Drug use for medical and social purposes can be traced back to thousands of years B.C.E.; however, the first recorded study of drug addiction can be dated back to a study of morphine addiction (Levinstein,1878). Subsequent research on combating addiction lacked scientific resources, leaving it largely misunderstood – if not ignored. By the 1960s, the scientific community was still at a loss for how to treat drug addiction, and thus turned it over to law enforcement under the jurisdiction of the Bureau of Drug Abuse Control (BDAC) and the Federal Bureau of Narcotics (FBN) (DEA, n.d.), deprioritizing prevention and rehabilitation (Musto, 1996). The "War on Drugs" was born.

In 1973, the Nixon Administration created the Drug Enforcement Agency (DEA) because "the introduction of drugs into American culture and the efforts to 'normalize' drug use started to take a terrible toll on the nation" (DEA, n.d., para. 1). Massive efforts to curtail drug trafficking and use continued. In Ohio, which has taken a "zero tolerance" stance on drug use (Wedd, 2015), the state prison population nearly quadrupled between 1980 and 2016 (ACLU of Ohio, 2016). Scholars have argued that this has perpetuated a criminal justice system that supported aggressive policing and mass incarceration for drug offenses in the United States, thereby removing treatment as an option (Duke, 2010) while human rights groups claim that nearly 90% of inmates have some history of drug use (ACLU of Ohio, 2016).

While scholars have argued that the War on Drugs led to racialized over-incarceration of urban Black males specifically, the more recent opiate epidemic has hit rural Ohio profoundly. This epidemic has been largely attributed to what began as addiction to over-prescribed prescription painkillers (Zezima, 2018). Rural judiciaries often lack the resources (e.g., sufficient treatment options), leaving incarceration as the only choice. In addition, judges in rural areas may reflect the often more conservative beliefs of their constituents, opting to lock up offenders (Glunt, 2015), leading to overcrowding of local jails.

### Opiate Addiction in [Rural] Ohio

"Ground zero" describes an epicenter of a catastrophe, and Ohio trails West Virginia as the center of what has been dubbed by the media as "the opiate epidemic." In fact, media reports indicate that opiates are responsible for nearly 68% of all drug overdose fatalities. Perhaps what has been most troubling to Ohioans is how the drug abuse crisis has crept into the rural areas. No one seems immune. As one Ohio Farm Bureau writer described it:

The drug epidemic has swept into Ohio and taken hold unlike any other health care crisis before it. Opioids. Heroin. Fentanyl. Carfentanil. Meth. It used to be conventional wisdom that drug problems were confined to the big cities and urban areas. No more. (Milligan Stammen, 2017, para. 4-5)

As a result, national news entities turned their focus on Ohio to cover the epidemic, garnering media attention that Ohioans are typically used to only in major election years.

**Legislative approaches.** One response to the [de]criminalizing of drug use (and subsequent addiction) has come via proposed legislation to either make certain types of drug use legal (e.g., legalizing the use of small quantities of marijuana with Issue 3 in 2015, which was rejected by 64% of voters) or reduce criminal penalties for drug [ab]users (e.g., Issue 1 in 2018).

***Issue 3.*** As described above, Ohio voters rejected Issue 3 nearly 2-1 in 2015, the first time they faced a Constitutional Amendment that would legalize marijuana. The legislation was controversial, namely because of its "monopoly" clause. In fact, several news organizations identified a list of reasons it failed, citing the monopoly, which would have made it legal for only 10 previously chosen "grow" facilities (Saker, 2015). Past research suggested that the monopoly was the most popular reason for opposing Issue 3 (Wagstaff & Knopf, 2017). However, Legislative efforts did not cease. In September of 2016, Ohio Legislators passed House Bill 523, making Ohio the 28th state to legalize marijuana for medicinal purposes (The Ohio Legislature, 2016). Subsequently, Legislators passed House Bills 248, 4, and 497, all of which were specifically aimed at containing the opiate epidemic (Wedd, 2015).

***Issue 1.*** The primary purpose of Issue 1 was to reduce penalties for crimes obtaining, possessing, and using illegal drugs, as well as to repurpose funds previously used to incarcerate offenders (Ohio Secretary of State, 2018).

*Proponents.* The main proponent of Issue 1 was the Ohio Safe and Healthy Communities Campaign, a non-profit group, which was predominantly financially supported by out-of-state donors including the Chan-Zuckerberg Initiative, a philanthropic organization founded by Facebook mogul Mark Zuckerberg and his wife (Borchardt, 2018). All in all, the campaign spent more than $17.6 million to advocate its position (Ballotpedia, 2018), making it extremely likely that media users of all types were exposed to several pro-Issue 1 messages. Supporters of the proposed amendment included then-gubernatorial candidate Richard Cordray, former Governor Ted Strickland, former U.S. House Speaker Newt Gingrich, singer John Legend, Netflix CEO Reed Hastings, several local Democratic parties and elected officials, the American Civil Liberties Union of Ohio, and several faith-based non-profits in Ohio.

Proponents argued that Ohio could redirect the $1.8 billion that Ohioans spend on a "broken prison system where too many people who pose little public safety risk are incarcerated" into underfunded treatment programs (Ohio Secretary of State, 2018, "Vote Yes" Argument #2). Instead, they argued, money could be better spent on treatment programs for addiction, which would reduce recidivism. Proponents were also careful to underscore that those who were a danger to public safety would remain incarcerated.

*Opponents.* The Vote No to Protect Ohio Committee led the campaign in opposition to Issue 1, spending a bit more than $1.7 million to convince the voting public to vote "no." Major contributors to this campaign included Ohioans for a Healthy Economy and Western & Southern. Opponents included then-Governor John Kasich, then-gubernatorial candidate Mike DeWine, the Ohio Republican Party, several local Republican organizations and officials, the Fraternal Order of Police of Ohio, Inc., and several state judicial associations and no media editorial boards publicly supported it (Ballotpedia, 2018).

Opponents claimed Issue 1 undermined treatment programs, reduced sentence time for violent offenders, and shifted cost burdens to local governments. The Ohio Revised Code 2925.11 indicates that possessing or using a deadly drug is classified as a felony, but Issue 1 would have changed this from a felony to a misdemeanor, which could have eliminated jail time. Opponents of Issue 1 also criticized it for failing to prescribe effective treatment for offenders, which judges and law enforcement officials argued is best motivated by punishment such as the threat of jail time (Govaki, 2018). Opponents underscored the importance of protecting communities from drug offenders, whom they feared would get a proverbial "slap on the wrist," as Ohio Supreme Court Justice Maureen O'Connor argued, "I fear for the safety of our state" (Stratford, 2018, para. 8). In fact, O'Connor, a major opponent, issued a statement warning voters that Issue 1's "passage would gravely endanger Ohioans" (O'Connor, 2018, para 11). This intent to protect others may be explained by Davison's (1983) Third-Person Effect Hypothesis.

**The Third-Person Effect and Issue 1**

The Third-Person Effect Hypothesis (Davison, 1983) consists of two major components or tenets: the perceptual tenet, which suggests individuals may perceive that others (i.e., third-person "they") are more influenced by [media] communication than themselves (i.e., first-person "me"), and the behavioral tenet, which indicates individuals who perceive negative media effects on others will do something about these perceptions, typically by supporting the restriction of the content (see Perloff, 1989; 1993; 1999; 2002). Scholars claim that the perceptual bias serves as the best predictor of behavioral outcomes (Peiser & Peter, 2000).

The perceptual bias is a function of "determining how different from ourselves the other people in question are, thereby moving ourselves outside of influence's way" (Andsager & White, 2007, p. 80). As Perloff (2002) suggests, individuals "should be loathe to admit that they are influenced by messages when such admission reflects negatively on the self" (p. 495), typically manifested as support for censorship or other media content restrictions (Perloff, 1999), yet this can certainly apply beyond the willingness to censor (Wei, Lo, Lu, & Hou, 2015). However, past research has also examined different manifestations of behavior such as voting. For example, the behavioral outcome motivated by political advertising intended

to persuade individuals to vote for a candidate or issue could be manifested as the vote itself (Golan, Banning, & Lundy, 2009; Griswold, 1992). Likewise, a concern for safety could motivate one to vote in a certain way as a form of protective measure (Liu & Lo, 2014). Still, few Third-Person Effect studies have explored behavioral outcomes beyond the aforementioned support for censorship. Thus, in the context of this study, perhaps the third-person effect is two-fold: (1) Individuals opposed to the Issue may have believed that others were "duped" by communication (e.g., news stories, social media, advertising) about it (perception); therefore, they would be highly motivated to go vote against the issue in order to protect themselves [and others] (behavior); and (2) Individuals opposed to the Issue may have believed it passing would have affected other people more than themselves (e.g., it would create a "slippery slope" for getting away with drug offenses (perception), and thus were highly motivated to go vote against it in order to help prevent rampant drug abuse from happening (behavior)).

Within the context of evaluating legislation to make a voting decision, most people gather information from media, which include both mainstream news sources, social media, and advertisements. Nevertheless, as indicated above, individuals are not readily willing to admit that these sources influence their attitudes or ultimate decisions (e.g., voting behaviors) – a third-person effect. The question is how this perception manifests as voters take to the polls to engage in voting behavior as it pertained to a public health crisis (i.e., a proposed legislative response to dealing with drug offenses). This, of course, is an answer to requests to increase research efforts on [different manifestations of] the behavioral component (Xu & Gonzenbach, 2008).

Considering media messages about Issue 1, which received a lot of [media] attention, it is important to investigate third-person perceptions of media coverage and advertising about the proposed legislation and specific voting behaviors. As mentioned above, if an opposer to Issue 1, concerned that others would be misled or misinformed by the message, saw an advertisement urging a "yes" vote (which was not unlikely, given that proponents of Issue 1 spent nearly $17 billion compared to opponents, who spent roughly $1.7 billion), is it likely that the individual would be more likely to cast a "no" vote to offset the others? If so, what led to these perceptions?

**Antecedents to Third-Person Perceptions**

Several individual differences and demographic variables have been examined for their role in contributing to third-person perceptions (e.g., Conners, 2005; Haridakis & Rubin, 2005; Lasorsa, 1989; Perloff, 1989; Tiedge, Silverblatt, Havice, & Rosenfeld, 1991; Paul, Salwen, & Dupagne, 2013; Vallone, Ross, & Lepper, 1985). These investigations have helped to "explain the theoretical underpinnings of the third-person effect" (Paul, Salwen, & Dupagne, 2000, p. 83). As Perloff (1993) suggests, individual differences "reflect or indirectly point to underlying conceptual factors that actually are impacting on perceptions of media effects on others and the self" (p. 175).

**Background Characteristics**

**Locus of control.** One factor to consider is locus of control, or "the general belief that one's behavior can have an impact on the environment and that one is capable of controlling outcomes through one's own behavior" (Maddux, 1995, p. 22). This describes how much individuals feel they are in control of their daily lives (Rotter, 1966). While internally controlled individuals tend to believe they control their behaviors and outcomes, externally controlled individuals tend to believe their lives are controlled largely by other forces such as fate or luck. Past research suggests that people who are internally controlled exhibit greater third-person perceptual bias than those who are more externally controlled (Haridakis & Rubin, 2005). This control has been attributed to people's tendency to "overestimate how much control they have over situations," which leads to "perceived invulnerability," and to the possibility that the "illusion of control may lead to third-person perceptions" (Peiser & Peter, 2000). Haridakis and Rubin (2005) found that individuals with high internal locus of control tend to underestimate the effects of exposure to negative media content on themselves, while worrying about the effects it has on others. Thus, internally controlled voters, may fear the worst when considering the impact of media coverage of Issue 1 – and its subsequent potential passing.

**Drug [ab]use (i.e., personal experience).** Media effects scholars have long-suggested that personal experience and interpersonal relationships – not just media – play an important role in shaping people's perceptions (e.g., Klapper, 1960), including third-person perceptions in that lived experience leads to greater third-person perceptual biases, particularly when taking political ideology into account (Johansson, 2015). Nevertheless, the question remains: Does lived experience of using and/or abusing drugs (or being exposed to drug use by others) impact third-person perceptions about media coverage of Issue 1 on the self [and others] as well as the hypothetical passage of the Issue?

**Political ideology.** While there is not published evidence to suggest that political ideology contributes to third-person perceptual biases for one end of the spectrum more than another, the political nature of Issue 1 does make it relevant. A proverbial political line was drawn between Democrats who largely endorsed Issue 1 and Republicans who largely opposed it (Ballotopedia, 2018). Thus, it is important to see if party lines impacted perceptual biases toward media coverage of Issue 1, toward its hypothetical passing, and toward vote cast on the Issue.

**External Factors**

In addition to the background characteristics that may influence third-person perceptions, external factors also may play a role. This includes perceived desirability of a message – in this case, promoting Issue 1 – and his or her perceived social distance from a variety of target "others."

**Message desirability.** Scholars have argued that the type of media message and its desirability are inextricably related (Gunther & Thorson, 1992) because individuals "operate to maintain and enhance their self- identities" by identifying socially desirable behavior, imitating it, and "discounting it for others as a way to maintain the relative superiority of the self" (p. 578). Taken within the context of the third-person effect, individuals [have a desire to] feel impervious to negative messages while feeling responsive to positive ones (Gunther, 1995; Gunther & Mundy, 1993). Thus, research has indicated that third-person perceptions are greater when messages are "deemed antisocial or in some way harmful or dysfunctional to society" (Lo & Paddon, 1999, p. 80).

Moreover, several studies have identified a relationship between the behavioral tenet of the third-person effect hypothesis (i.e., support for content restrictions) and "negative" media content (see meta-analyses by Eveland & McLeod, 1999; Sun, Shen, & Pan, 2008; Xu & Gonzenbach, 2008). This research aims to investigate third-person perceptions and voting behavior as they pertain to a public health crisis, so it is important to highlight research providing empirical support for third-person perceptual biases as they pertain to public health and to politics. Past research has found links between perceptual biases and behavioral effects as they pertain to receiving news about health crises including the Fukushima nuclear crisis (Wei, Lo, Lu, & Hou, 2015), the pandemic H1N1 flu outbreak (Lee & Park, 2016), a tainted food recall (Wei, Lo, & Lu, 2010) and the avian flu outbreak (Wei, Lo, & Lu, 2008). These studies also identified multiple manifestations of the behavioral tenet including self-protection and taking corrective action (consistent with findings by Rojas, 2010).

There is also vast support for third-person perceptual bias as it pertains to political communication, including: political advertisements (Cohen & Davis, 1991; Cohen, Mutz, Price, & Gunther, 1988; Hong & Riffe, 2008; Paek, Pan, Abisaid, & Houden, 2005; Rucinski & Salmon, 1990; Salwen 1998; Wei & Lo, 2007) election coverage (e.g., news coverage, polls) of controversial figures or issues (Cohen & Tsfati, 2009; Gardikiotis, 2008; Golan, Banning, & Lundy, 2008; Pan, Abisaid, Paek, Sun, & Houden, 2006; Price & Stroud, 2006; Wei, Lo, & Lu, 2011;), stories about political unrest (Perloff, 1989), and news coverage of poll results in that supporters of the candidate losing in the polls were more likely to indicate political participation intention to help boost that candidate's chances (Kim, 2016).

Certainly, there is much evidence to suggest that messages that are interpreted to be negative or are believed to cause negative effects contribute to third-person perceptions. Thus, we sought to determine whether eligible Ohio voters would perceive media coverage of and/or media messages in support of Issue 1 as being socially undesirable, and whether their interpretations would contribute to the third-person perceptual bias and subsequent behavior (i.e., self-reported vote on Issue 1).

**Social distance.** Past research suggests that we also must consider perceived social distance, or the differences that individuals perceive between themselves and others (in this case, the students in their schools). Findings have suggested that individuals attribute their own resilience to negative media influences to internal strengths or traits. Likewise, they ascribe others' vulnerability to these same influences to some internal weakness (e.g., immaturity, lack of intelligence, naiveté) (Paul, Salwen, & Dupagne, 2000). The *social distance corollary* of the third-person effect hypothesis suggests that perceived effects change as individuals compare themselves with their close social circle instead of progressively unfamiliar others (Cohen, et al., 1988; Gunther 1991; White, 1997). Individuals view unfamiliar or distant members of the population as being unlike themselves. In other words, "they" are not like "me" (or people close to me), and this gap widens as social distance becomes greater. The generalized other is perceived as being incapable of protecting oneself from dangerous media effects (Andsager & White, 2007) (or perhaps simply danger), and the strength of the perceived effects are amplified as individuals compare themselves to increasingly distant others (Cohen & Davis, 1991). This could pertain to perceived distance between individuals and close others such as friends and relatives, individuals and others who were eligible to vote on Issue 1, and all other Ohioans who would have been affected by Issue 1. In this study, it was important to determine whether the relationship impacted third-person perceptions toward (1) media coverage of and/or in support for Issue 1 and (2) the would-be passage of Issue 1, as well as individuals' vote on Issue 1.

## Hypotheses and Research Questions

### Hypotheses

The main assumption of the third-person effect is individuals believe that media messages affect others more than themselves. Thus, we posited the following:

$H_{1a}$: Individuals judge media coverage supporting Issue 1 as having a greater effect on their friends/relatives, Ohio voters, and other Ohioans, respectively, than on themselves.

$H_{1b}$: Individuals judge the passing of Issue 1 as having a greater effect on their friends/relatives, Ohio voters, and other Ohioans, respectively, than on themselves.

In addition, we posited that desirability of media coverage of Issue 1 – particularly coverage of messages in support of the Issue would impact third person perceptual bias, attitudes toward Issue 1, and vote on Issue 1 (i.e., to tap the behavioral tenet):

$H_{2a}$: When message desirability decreases (e.g., desirability of media coverage supporting Issue 1), third-person perceptual bias among respondents increases.

$H_{2b}$: The message desirability of media coverage of support for Issue 1 would be negatively associated with support for Issue 1, comfort with Issue 1, and ultimately vote on Issue 1.

In addition, we predicted that third-person perceptions for media coverage supporting Issue 1 and the passing of Issue 1 would impact comfort with the Issue:

$H_{3a}$: The magnitude of third-person perceptions for media coverage supporting Issue 1 (for each of the comparison groups) would be positively associated with comfort with Issue 1.

$H_{3b}$: The magnitude of third-person perceptions for the passing of Issue 1 (for each of the comparison groups) would be positively associated with comfort with the Issue.

Likewise, because of past research to suggest that social distance impact third-person perceptual bias, we posited:

> $H_{4a}$: Greater social distance (i.e., between the respondent and friends/relatives, Ohio voters, and other Ohioans) would be related to greater perceptual bias for media coverage in support of Issue 1 for each of the self-to-comparison groups.

> $H_{4b}$: Greater social distance (i.e., between respondents and each of the comparison groups) would be related to greater perceptual bias toward the passing of Issue 1.

Past behavior seems to play a role in predicting future behavior, so we also predicted this would be true among Issue 3 and Issue 1 voters. We proposed:

> $H_5$: There is an association between past vote on Issue 3 and on Issue 1.

Finally, past research suggests personal experience and interpersonal relationships – and not just media – play an important role in shaping people's perceptions (e.g., Klapper, 1960), and that third-person perceptions may also be influenced by beliefs that others are more influenced by media while oneself is more influenced by personal experience (Johannson, 2015). Thus, we posited that personal experience with drug (ab)use might shape feelings about Issue 1:

> $H_6$: Past drug users and abusers will be more supportive of Issue 1.

**Research Questions**

In addition, we posed research questions to better ascertain the nuances of associations among the aforementioned variables. First, given what we knew about the failure of Issue 3 – and that Ohio voters took issue with certain portions of it, we asked about attitudes toward the various portions of Issue 1:

> $RQ_1$: What were the respondents' overall attitude toward Issue 1 and the favorability of its various provisions?

We also wondered what motivated voters to turn out in the November 2018 election:

> $RQ_2$: What were respondents' motives for voting in November 2018?

Because of the multitude of endorsements in favor of Issue 1 from liberal interest groups – and the converse for conservative interest groups, we questioned whether this divide would be present among voters. Therefore, we asked:

> $RQ_3$: What is the relationship between political ideology and comfort with Issue 1?

In addition, we were interested in how individual differences/background variables and external factors impacted third-person perceptual bias toward media coverage of Issue 1 and toward the hypothetical passage of Issue 1. Thus, we asked:

> $RQ_{4a}$: How do background variables (i.e., political affiliation, LOC, drug use, drug abuse, past vote on Issue 3, Issue 1 support) and external factors (e.g., exposure to media messages from a variety of sources about Issue 1, message desirability, and social distance) predict third-person perceptual bias as it pertains to media coverage of/in support for Issue 1?

> $RQ_{4b}$: How do the background variables and external factors predict third-person perceptual bias as it pertained to the passage of Issue 1?

Finally, we were interested in how the aforementioned individual differences/background characteristics and the third-person perceptual bias influenced actual vote on Issue 1:

$RQ_{5a}$: How do the background variables and external factors plus third-person perceptual bias as it pertained to the passage of Issue 1 predict vote on Issue 1?
$RQ_{5b}$: How do the variables, coupled with third-person perceptual bias toward the passage of Issue 1 for each of the comparison groups?

## Methodology

The goal of this research was to collect information about perceptions of drug (ab)use and associated legislation – namely Ohio's November 2018 ballot Issue 1. In order to collect this information, a survey link and QR code was distributed in late-January to early February 2019 via the authors' online social networks (i.e., LinkedIn, Twitter, Facebook), other relevant Facebook pages (i.e., for supporters, opponents, the Ohio Democratic Party, and the Ohio Republican Party), and enabled it to be subsequently shared with others. This has become a widely accepted data collection technique, given recent problems with survey completion rates (Boulianne, 2015). A unique aspect of this sample was the ability to reach a variety of constituents in what has been dubbed "ground zero" for Ohio's opioid epidemic.

Respondents ($N$ = 545) received the link and scannable QR code via a variety of social networks and were encouraged to share it with their networks as well. Respondents had to be eligible to vote in Ohio. After eliminating incomplete surveys, the resulting sample ($n$ = 346) was used for all statistical analyses. The age range was 23 to 82 years ($M$ = 38.9, $SD$ = 15.66), 30.6% were male while 68.8% were female, and 0.6% were other/prefer not to say. In terms of ethnicity, 93.4% were Caucasian, 4% were Black/African-American, 0.3% were American Indian or Alaskan Native, 0.3% were Asian, 1.2% were Hispanic or Latino, and 0.9% were Other. Among respondents, 9.8% had some or all high school education, 74.3% had some or all college education, and 15.9% had graduate education (e.g., masters, professional, or doctorate degree). The median household income was between $60,000 and $69,999. In terms of voting, 88.4% were registered Ohio voters, 10.1% were not, and 1.4% did not know. Considering Counties represented, the highest percentages were from "ground zero" in Ohio's opioid epidemic: 20.5% from Clinton, 15% from Montgomery, 10.1% from Warren, and 9.2% from Marion. In total, respondents represented 50 of Ohio's 88 Counties.

### Measures

**Third-person perceptual bias.** In third-person effect research, perceptual bias is said to occur when respondents underestimate the effect of media on oneself and overestimate it on others. In most third-person effect research, perceptual bias is measured by parallel-phrased questions regarding perceptions of media effects on self and on others (Price & Tewksbury, 1996). This measure was adapted from Haridakis and Rubin (2005), included a "self" question that asked respondents to indicate on a 5-point scale how affected (1 = not at all affected and 5 = very affected) they believed they would be by exposure to media coverage supporting Issue 1. The mean estimated effect of coverage on friends and relatives ($M$ = 2.93, $SD$ = 1.08), other Ohio voters ($M$ = 3.44, $SD$ = 0.98), and other Ohioans ($M$ = 3.40, $SD$ = 0.97) was greater than the mean estimated effect of the story on oneself ($M$ = 2.39, $SD$ = 1.15).

We calculated third-person perceptual bias scores by reverse coding responses to the self-item (i.e. whether media coverage supporting Issue 1) and summing and averaging it with each of the three comparison groups. Thus, higher scores on the pair of self and friends/relatives ($M$ = 3.27, $SD$ = 0.57), self and Ohio voters, ($M$ = 3.52, $SD$ = 0.61), and self and Ohioans in general ($M$ = 3.51, $SD$ = 0.62) indicated greater third-person perceptual bias.

In addition, we also calculated third-person perceptual bias as it pertained to the passage of Issue 1. The mean estimated effect of Issue 1 passing on friends and relatives ($M$ = 3.67, $SD$ = 1.48), other Ohio

voters ($M$ = 3.76, $SD$ = 1.63), and other Ohioans ($M$ = 3.80, $SD$ = 1.78) was greater than the mean estimated effect of the passage on oneself ($M$ = 2.92, $SD$ = 1.48). We also calculated third-person perceptual bias scores by reverse coding responses to the self-item (i.e. whether media coverage supporting Issue 1) and summing and averaging it with each of the three comparison groups. Thus, higher scores on the pair of self and friends/relatives ($M$ = 3.29, $SD$ = 0.86), self and Ohio voters, ($M$ = 3.34, $SD$ = 0.90), and self and Ohioans in general ($M$ = 3.36, $SD$ = 0.96) indicated greater third-person perceptual bias.

**Locus of control.** To measure locus of control, we used an abbreviated version of Levenson's (1974) scale in which respondents indicated how much they agree with 12 statements (1 = strongly disagree, 5 = strongly agree) that reflect chance control, powerful others control, and internal control (Lindbloom & Faw, 1982) (Hanson & Haridakis, 2009; Haridakis & Rubin, 2005; Rubin, 1993). Responses were summed and averaged to create an overall locus of control score in which higher scores indicate greater internal control ($M$= 3.84, $SD$ = 0.55).

**Political party affiliation.** Respondents indicated their party affiliation on a 7-point Likert-type scale ranging from 1 = strong Democrat to 7 = strong Republican. Among them, 29.5% indicated they were independent or neutral, 21.7% indicated they were Republican, 15.3% indicated they were moderate Republicans, 12.1% indicated they were Democrat, 9.5% indicated they were moderate Democrats, 6.1% indicated they were strong Democrats, and 5.8% strong Republicans. We summed and averaged these to reveal that they were relatively moderate overall ($M$ = 4.24, $SD$ = 1.62).

**Drug ab[use].** To ascertain past drug use among respondents, we asked them to indicate past or current use of a variety of illegal drugs (for recreational use). In order to simplify, we recoded the responses to indicate non-user (0) or past/current user (1); 40.5% reported being a past or current user. Likewise, to determine whether respondents had ever abused drugs, we asked them to indicate whether they had faced a variety of outcomes of drug abuse, including [in]voluntary treatment, criminal convictions, and incarceration. To simplify, we recoded the responses to indicate non-abuser (0 = never faced treatment, conviction, punishment, or incarceration) or abuser (1 = faced treatment or some variation of punishment for drug abuse). Among respondents, 10.7% reported facing some sort of treatment or punishment for drug abuse.

**Frequency of voting behavior.** Respondents were then asked how often they voted in elections; 11.3% indicated "never," 6.9% indicated "rarely," 16.5% indicated "sometimes," 24.6% indicated "very often," and 40.8% indicated "always."

**Past vote on Issue 3.** To gain a sense of past vote on other recent drug-related legislation, we asked respondents to indicate how they voted on Issue 3 in 2015. Respondents indicated that 41.3% did not vote on Issue 3, 27.5% voted against Issue 3, 23.7% voted for Issue 3, and 7.5% did not remember.

**Exposure to Issue 1 messages.** To gain a sense for respondents' media exposure to messages about Issue 1, we asked them how frequently they saw/heard messages concerning Issue 1 from a variety of sources (measured on a 5-point Likert-type scale where 1 = never and 5 = very often). We summed and averaged each for a total exposure measure ($M$ = 2.81, $SD$ = 0.91), with the most coming via social media ($M$ = 3.32, $SD$ = 1.27).

**Attitudes toward Issue 1.** To get a sense of support for the various provisions outlined in the ballot language, we also asked questions about the perceived favorability of each (measured on a 5-point Likert-type scale where 1 = not favorable and 5 = very favorable). We also asked respondents to indicate the overall favorability of Issue 1 to them ($M$ = 2.66, $SD$ = 1.41), friends and relatives ($M$ = 2.56, $SD$ = 1.16), Ohio voters ($M$ = 2.68, $SD$ = 1.03), and Ohioans in general ($M$ = 2.73, $SD$ = 1.03). In addition, we asked how comfortable they were with Issue 1 (on a 5-point Likert-type scale where 1 = extremely uncomfortable and 5 = extremely comfortable) ($M$ = 2.76, $SD$ = 1.29). In addition, respondents indicated their overall support for Issue 1 (also on a 5-point Likert-type scale where 1 = strong opposition and 5 = strong favorability) ($M$ = 2.66, $SD$ = 1.40).

**Vote on Issue 1.** To gauge the relative importance of turning out to vote on Issue 1, we asked respondents to indicate how important it was that they voted on the Issue (on a 5-point Likert-type scale where 1 = not at all important and 5 = very important) ($M$ = 3.38, $SD$ = 1.33). We also asked respondents

to indicate their vote on Issue 1 in 2018. Among them, 42.8% voted against Issue 1, and 27.2% voted in favor of Issue 1, and 30.1% indicated they did not vote.

**Message desirability.** To determine message desirability, we asked respondents to indicate how they felt specifically about media coverage supporting Issue 1. Using a six-item 5-point Likert-type scale adapted from Hitchon, Chang, and Harris (1997), respondents indicated the degree (measured on a 5-point scale) to which they believed the coverage was socially desirable ($M$ = 2.93, $SD$ = .95), beneficial ($M$ = 3.37, $SD$ = 1.77), socially responsible ($M$ = 2.96, $SD$ = .936), favorable to themselves ($M$ = 2.76, $SD$ = 1.03), favorable to their friends/relatives ($M$ = 2.93, $SD$ = .92), and favorable to Ohio voters ($M$ = 3.04, $SD$ = .92). We summed and averaged responses to create an overall index of message desirability ($M$ = 2.45, $SD$ = 0.90).

**Social distance.** To ascertain respondents' perceived social distance, we adapted an index from Eveland, Nathanson, Detenber, and McLeod (1999) to measure directly perceived similarity of oneself to each comparison group. Respondents rated this perceived similarity (where 1 = not at all similar, 5 = very similar) to each of the three target groups. As recommended by Eveland et al. (1999), to "reflect social distance, the converse of similarity," we reverse coded these items so that higher social distance scores reflect greater social distance between self and each comparison group (p. 284). Respondents indicated greater social distance between themselves and other Ohioans in general ($M$ = 3.02, $SD$ = 0.85) than other Ohio voters ($M$ = 2.97, $SD$ = 0.85), and friends/relatives ($M$ = 2.30, $SD$ = 0.94).

## Results

The goal of this study was to examine third-person perceptual biases among Ohioans, and whether these perceptual biases contributed to their self-reported vote on Issue 1 in the November 2018 election. We also examined how several variables, including background characteristics, external factors, and perceptual bias predicted respondents' vote on Issue 1.

### Hypotheses

Hypothesis $1_a$ posited that respondents ($n$ = 346) would judge media coverage supporting Issue 1 as having a greater effect on others than on themselves. We ran a series of paired samples t-tests to analyze the mean difference between perceived effects on oneself and each of the three comparison groups. Perceived effects of media coverage supporting Issue 1 were lower for respondents than for their friends/relatives, $t(345) = -8.81$, $p < .001$. Likewise, perceived effects of media coverage supporting Issue 1 were lower for respondents than for Ohio voters, $t(345) = -15.89$, $p < .001$. Finally, perceived effects of media coverage supporting Issue 1 were lower for respondents than for Ohioans in general, $t(345) = -15.298$, $p < .001$. This suggests that the respondents perceived each of the target groups as being more influenced by media coverage supporting Issue 1, indicating a third-person perceptual bias.

Hypothesis $1_b$ posited that respondents would judge the passing of Issue 1 as having a greater effect on each of the comparison groups than on themselves. We ran a series of paired samples t-tests to test these hypotheses to analyze the mean difference between perceived effects on oneself and each of the three comparison groups. Perceived effects of the passage of Issue 1 were lower for respondents than for their friends/relatives, $t(345) = -2.356$, $p < .05$. Likewise, perceived effects of the passage of Issue 1 were lower for respondents than for Ohio voters, $t(345) = -2.789$, $p < .01$. Finally, perceived effects of the passage of Issue 1 were lower for respondents than for Ohioans in general, $t(345) = -2.943$, $p < .01$. Thus, the results suggest that the respondents perceived all three comparison groups as being more affected by the passage of Issue 1 than themselves, indicating a perceptual bias. Both hypotheses were supported.

Hypothesis $2_a$ posited that when message desirability decreased (e.g., desirability of media coverage supporting Issue 1), third-person perceptual bias among respondents would increase. There was a significant negative correlation between overall message desirability and third-person perceptual bias from self-to-friends/relatives ($r$ = -.12, $p < .05$), but not between self-to-Ohio voters ($r$ = -.09, $p$ = .17), and self-to-other Ohioans ($M$ = 3.51, $SD$ = 0.62) ($r$ = -.096, $p$ = .08). Hypothesis $2_a$ was partially supported.

Hypothesis $2_b$ predicted that the message desirability of media coverage of support for Issue 1 would be negatively associated with support for Issue 1, comfort with Issue 1, and ultimately vote on Issue 1. There was a significant correlation between message desirability ($M$ = 3.00, $SD$ = 0.79) and support for Issue 1 ($M$ = 2.66, $SD$ = 1.40) $r$ = .27, $p$ < .001 and between message desirability ($M$ = 3.00, $SD$ = 0.79) and comfort with Issue 1 ($M$ = 2.76, $SD$ = 1.29) $r$ = .29, $p$ < .001. Finally, results of a multinomial logistic regression analysis revealed that for respondents' vote on Issue 1, message desirability was a statistically significant predictor (log likelihood 178.45, $\chi^2$ = 21.54, df = 2, $p$ < .001). When contrasting a "yes" vote with did not vote (i.e., as the reference category), those viewing media coverage in support of Issue 1 as higher in message desirability were 1.7 times (OR = 1.2-2.5, $p$ < .01, 95% CI) more likely to have reported voting "yes." Hypothesis $2_b$ was fully supported.

Hypothesis $3_a$ predicted that the magnitude of third-person perceptions for media coverage supporting Issue 1 (for each of the comparison groups) would be positively associated with comfort with Issue 1 ($M$ = 2.76, $SD$ = 1.29). There were significant negative correlations between third-person perceptual bias from respondents to friends/relatives and comfort ($r$ = -.17, $p$ <.01) and between respondents and other Ohioans ($r$ = -.13, $p$ < .05). There was no significant correlation between third-person perceptual bias from respondents to Ohio voters and comfort ($r$ = -.06, $p$ = .24). Hypothesis $3_b$ predicted that the magnitude of third-person perceptions for the passing of Issue 1 (for each of the comparison groups) would be positively associated with comfort with the Issue. There were significant correlations between respondents and all three groups, including self to friends/relatives ($r$ = .30 $p$ < .001), self to Ohio voters ($r$ = .38 $p$ < .001), and self to other Ohioans ($r$ = .41 $p$ < .001). The hypotheses were partially supported.

Hypothesis $4_a$ and posited that greater social distance (i.e., between the respondent and friends/relatives, Ohio voters, and other Ohioans) would be related to greater perceptual bias for media coverage in support of Issue 1 for each of the self-to-comparison groups. There was a significant correlation between perceptions of social distance between respondents and friends/relatives and third-person perceptual bias from oneself to friends/relatives ($r$ = .11, $p$ < .05), but not between respondents and Ohio voters ($r$ = -.38, $p$ = .49) nor other Ohioans ($r$ = .04, $p$ = .47). Thus, this hypothesis was only partly supported. Hypothesis $4_b$ and posited that greater social distance (i.e., between respondents and each of the comparison groups) would be related to greater perceptual bias toward the passing of Issue 1. There were no significant correlations between perceptions of social distance between respondents and friends/relatives and third-person perceptual bias from oneself to friends/relatives ($r$ = -.01, $p$ = .85), between respondents and Ohio voters ($r$ = .04, $p$ = .47) nor between respondents and other Ohioans ($r$ = .04, $p$ = .49). Hypothesis $4_b$ was not supported.

Hypothesis 5 predicted that there would be an association between past vote on Issue 3 and vote on Issue 1. Results of a chi-square indicate that there was a significant association between past vote on Issue 3 in November 2015 and whether respondents voted in favor of Issue 1, $\chi^2$ (6) = 146.51, $p$ < .001. Thus, Hypothesis 5 was supported.

Finally, Hypotheses $6_a$ and $6_b$ posited that past drug users and abusers would be more supportive of the Issue. Results of a paired samples t-test revealed that there was a significant difference between drug users and non-users in terms of support for Issue 1, $t$(345) = -34.58, $p$ < .001 and between drug abusers and non-abusers in terms of support, $t$(345) = -30.92, $p$ < .001. Post-hoc chi-square analysis revealed that there was a significant association between self-reported drug use and casting a "yes" vote, $\chi^2$(2) = 27.86, $p$ < .001 and between self-reported drug abuse and casting a "yes" vote, $\chi^2$ (2) = 13.04, $p$ < .01. Both hypotheses were supported.

**Research Questions**

The first research question asked about respondents' overall attitude toward Issue 1 and the favorability of its various provisions. Overall, respondents viewed Issue 1 as not very favorable ($M$ = 2.66, $SD$ = 1.41) (measured on a 5-point Likert-type scale where 1 = not favorable and 5 = very favorable), and the favorability of the various provisions on the same 5-point Likert-type scale. A post-hoc regression analysis revealed that the provisions accounted for 65% of the variance in support for Issue

1, $R^2$ = .65, $F$(5, 340) = 123.57, $p$ < .001. Reducing prison sentences by 25% ($M$ = 3.03, $SD$ = 1.41). ($\beta$ = .28, $p$ < .001), prohibiting jail time until an offender's third offense within 24 months ($M$ = 2.48, $SD$ = 1.40) ($\beta$ = .24, $p$ < .001), and allowing for requests for sentence reductions ($M$ = 2.53, $SD$ = 1.39) ($\beta$ = .29, $p$ < .001) were all significant predictors.

We also ascertained respondents' motives for voting in November 2018. They could choose as many reasons as preferred, and we calculated the overall percentages to the whole for each. The most popular were to vote for Governor (50.6%), to vote for a U.S. House and/or Senate candidate (49.4%), and to vote on Issue 1 (47.7%).

Research Question $3_a$ examined the relationship between political ideology and comfort with/support for Issue 1. A Pearson's Product Moment Correlation revealed that there was a significant negative correlation between political ideology and comfort with Issue 1, $r$ = -.44, $p$ < .001. The more Conservative the respondent, the less comfort. There was also a significant negative correlation between political ideology and support for Issue 1, $r$ = -.51, $p$ < .001.

Research Question $4_a$ asked: How do background variables (i.e., political affiliation, LOC, drug use, drug abuse, past vote on Issue 3, Issue 1 support) and external factors (e.g., exposure to media messages from a variety of sources about Issue 1, message desirability, and social distance) predict third-person perceptual bias as it pertains to media coverage of/in support for Issue 1? This question was examined using three hierarchical regression analyses for each of the three perceptual bias evaluations: self-to-friends/relatives, self-to-Ohio voters, and self-to-other Ohioans. Background variables were entered on the first step, and external factors were entered on the second step.

The first model to predict third-person perceptual bias toward media messages in support of Issue 1 from self to friends/relatives was significant $R^2$ = .04, $F$(6, 339) = 2.52, $p$ < .05. Political ideology ($\beta$ = -.13, $p$ < .05) and support for Issue 1 ($\beta$ = -.23, $p$ < .001) were significant. The inclusion of external factors on the second step added 5% to the explained variance. The change in F was significant $R^2$ = .11, $F$(8, 331) = 2.90, $p$ < .001. Political affiliation ($\beta$ = -.12, $p$ < .05), support for Issue 1 ($\beta$ = -.25, $p$ < .001), frequency of exposure to newspapers stories about Issue 1 ($\beta$ = -.19, $p$ < .01), and exposure to social media posts about Issue 1 ($\beta$ = .15, $p$ < .05) were all significant predictors. The second model to predict third-person perceptual bias toward media messages in support of Issue 1 from self to Ohio voters was not significant $R^2$ = .03, $F$(6, 339) = 1.75, $p$ = .11. The inclusion of external factors on the second step made for a significant model ($R^2$ = .07, $F$(8, 331) = 1.81, $p$ < .05) added 4% to the explained variance, but the change in F was not significant ($F$ change = 1.83, $p$ = .07). Support for Issue 1 ($\beta$ = -.13, $p$ < .05), frequency of exposure to newspapers stories about Issue 1 ($\beta$ = -.18, $p$ < .01), and exposure to ads in favor of Issue 1 ($\beta$ = .16, $p$ < .05) were all significant predictors. The third model to predict third-person perceptual bias toward media messages in support of Issue 1 from self to other Ohioans was not significant $R^2$ = .03, $F$(6, 339) = 1.76, $p$ = .11. Support for Issue 1 ($\beta$ = -.13, $p$ < .05) was the sole significant predictor. The inclusion of external factors on the second step made for a significant model ($R^2$ = .07, $F$(8, 331) = 1.88, $p$ < .05) added 4% to the explained variance. The change in F was significant ($F$ change = 1.93, $p$ < .05). Frequency of exposure to newspapers stories about Issue 1 ($\beta$ = -.15, $p$ < .05), and exposure to ads in favor of Issue 1 ($\beta$ = .20, $p$ < .05) were significant predictors.

Research question $4_b$ asked: How do the background variables and external factors predict third-person perceptual bias as it pertained to the passage of Issue 1? This question was examined using three hierarchical regression analyses for each of the three perceptual bias evaluations: self-to-friends/relatives, self-to-Ohio voters, and self-to-other Ohioans. Background variables were entered on the first step, and external factors were entered on the second step.

The first model to predict third-person perceptual bias toward the hypothetical passing of Issue 1 from self to friends/relatives was significant $R^2$ = .21, $F$(6, 339) = 15.36, $p$ < .001. Drug use ($\beta$ = .13, $p$ < .01), drug abuse ($\beta$ = .23, $p$ < .001), and support for Issue 1 ($\beta$ = .30, $p$ < .001) were significant predictors. The inclusion of external factors on the second step made for a significant model ($R^2$ = .24, $F$(8, 331) = 7.52, $p$ < .001) added 3% to the explained variance. The change in F was not significant. Drug use ($\beta$ = .12, $p$ < .05), drug abuse ($\beta$ = .23, $p$ < .001), support for Issue 1 ($\beta$ = .32, $p$ < .001), and frequency of exposure to ads in favor of Issue 1 ($\beta$ = .19, $p$ < .01) were significant predictors.

The second model to predict third-person perceptual bias toward the hypothetical passing of Issue 1 from self to Ohio voters was significant $R^2 = .25$, $F(6, 339) = 18.38$, $p < .001$. Drug use ($\beta = .12$, $p < .05$), drug abuse ($\beta = .18$, $p < .001$), and support for Issue 1 ($\beta = .39$, $p < .001$) were significant predictors. The inclusion of external factors on the second step made for a significant model ($R^2 = .28$, $F(8, 331) = 7.52$, $p < .001$) added 3% to the explained variance. The change in F was not significant. Drug use ($\beta = .11$, $p < .05$), drug abuse ($\beta = .17$, $p < .001$), support for Issue 1 ($\beta = .41$, $p < .001$), frequency of exposure to ads in favor of Issue 1 ($\beta = .18$, $p < .01$) were significant predictors.

The third model to predict third-person perceptual bias toward the hypothetical passing of Issue 1 from self to other Ohioans was significant $R^2 = .27$, $F(6, 339) = 21.24$, $p < .001$. Drug use ($\beta = .13$, $p < .01$), drug abuse ($\beta = .13$, $p < .01$), and support for Issue 1 ($\beta = .44$, $p < .001$) were significant predictors. The inclusion of external factors on the second step made for a significant model ($R^2 = .30$, $F(8, 331) = 21.24$, $p < .001$) added 3% to the explained variance. The change in F was not significant. Drug use ($\beta = .12$, $p < .05$), drug abuse ($\beta = .13$, $p < .01$), support for Issue 1 ($\beta = .45$, $p < .001$), frequency of exposure to ads in favor of Issue 1 ($\beta = .19$, $p < .05$) were significant predictors.

Research questions $5_a$ and $5_b$ asked: was examined using three multinomial logistic regression analyses for each of the three perceptual bias evaluations: self-to-friends/relatives, self-to-Ohio voters, and self-to-other Ohioans as related to Issue 1 passing.

Research question $5_a$ sought to examine how the variables, coupled with third-person perceptual bias toward media messages about Issue 1 for each of the comparison groups. The first model (i.e., considering the role of social distance from self to friends/relatives and perceptual bias toward media messages supporting Issue 1 from self to friends/relatives in predicting vote on Issue 1) was significant (log likelihood 318.71, $\chi^2 = 427.68$, df = 34, $p < .001$). For the role of each predictor, see Table 1.

Table 1

*Summary of Regression Analysis Considering the Role of Social Distance between Respondents and Friends/Relatives and Perceptual Bias from Self to Friends/Relatives Toward Media Coverage in Support of Issue 1 Predicting Vote on Issue 1*

| | "Yes" Vote on Issue 1 | | "No" Vote on Issue 1 | |
|---|---|---|---|---|
| | *β* | *OR* (95% CI) | *β* | *OR* (95% CI) |
| Political Affiliation | -.41* | .67 (.48, .93) | -.03 | .97 (.71, 1.32) |
| LOC | -1.35* | .26 (.10, .70) | -.25 | .78 (.35, 1.75) |
| Support Issue 1 | 1.46*** | 4.29 (2.53, 7.27) | -1.04*** | .35 (.23, .55) |
| TV Coverage | -.26 | .77 (.47, 1.27) | .42 | 1.52 (.96, 2.42) |
| Newspaper Coverage | .35 | 1.41 (.86, 2.32) | .44* | 1.55 (.98, 2.44) |
| Radio Coverage | .10 | 1.11 (.70, 1.76) | .03 | 1.04 (.67, 1.59) |
| Social Media Posts | .19 | 1.20 (.76, 1.90) | -.30 | .74 (.50, 1.16) |
| Ads in Favor | .02 | 1.02 (.76, 1.79) | .39 | 1.48 (.90, 2.44) |
| Ads Opposed | .68* | 1.97 (1.19, 3.27) | .10 | 1.10 (.68, 1.77) |
| Message Desirability | -.35 | .71 (.37, 1.36) | -.22 | .81 (.46, 1.42) |
| Social Distance | -.55* | .58 (.36, .91) | .13 | .13 (.72, 1.78) |
| TPPB - Media | -.12 | .98 (.46, 2.11) | .00 | 1.00 (.48, 2.10) |
| Drug Use - None | .57 | 1.78 (.68, 4.63) | 1.18** | 3.24 (1.36, 7.73) |
| Drug Abuse - None | -.30 | .74 (.23, 2.38) | 1.08 | 2.93 (.66, 13.06) |
| "Yes" Vote on 3 | 3.49*** | 32.92 (8.99, 120.56) | 1.76** | 5.82 (1.86, 18.17) |

*Note.* The referent category was: "Did not vote on Issue 1." *** $p < .001$, ** $p < .01$, * $p < .05$

The second model (i.e., considering the role of social distance from self to Ohio voters and perceptual bias toward media messages supporting Issue 1 from self to Ohio voters in predicting vote on Issue 1) was significant (log likelihood 319.35, $\chi^2 = 427.03$, df = 34, $p < .001$). See Table 2.

Table 2
*Summary of Regression Analysis Considering the Role of Social Distance between Respondents and Ohio Voters and Perceptual Bias from Self to Ohio Voters Toward Media Coverage in Support of Issue 1 Predicting Vote on Issue 1*

| | "Yes" Vote on Issue 1 | | "No" Vote on Issue 1 | |
|---|---|---|---|---|
| | *β* | OR (95% CI) | *β* | OR (95% CI) |
| Political Affiliation | -.59*** | .55 (.39, .79) | -.10 | .91 (.66, 1.14) |
| LOC | -1.14* | .32 (.12, .84) | -.18 | .83 (.37, 1.89) |
| Support Issue 1 | 1.39*** | 4.02 (2.41, 6.68) | -1.03*** | .36 (.24, .55) |
| TV Coverage | -.28 | .76 (.44, 1.24) | .38 | 1.46 (.92, 2.32) |
| Newspaper Coverage | .37 | 1.45 (.87, 2.41) | .42 | 1.53 (.97, 2.40) |
| Radio Coverage | -.05 | .95 (.59, 1.54) | -.01 | 1.00 (.64, 1.54) |
| Social Media Posts | .22 | 1.24 (.80, 1.93) | -.25 | .78 (.53, 1.14) |
| Ads in Favor | .03 | 1.03 (.59, 1.81) | .47 | 1.60 (.96, 2.66) |
| Ads Opposed | .68** | 1.96 (1.19, 3.25) | .06 | 1.06 (.65, 1.73) |
| Message Desirability | -.26 | .77 (.42, 1.43) | -.26 | .77 (.44, 1.36) |
| Social Distance | -.62* | .54 (.29, .98) | -.23 | .80 (.49, 1.29) |
| TPPB - Media | -.71 | .49 (.23, 1.06) | -.31 | .74 (.36, 1.50) |
| Drug Use - None | .53 | 1.69 (.65, 4.41) | 1.08** | 2.94 (1.24, 6.93) |
| Drug Abuse - None | -.22 | .81 (.25, 2.57) | 1.13 | 3.01 (.69, 13.89) |
| "Yes" Vote on 3 | 3.34*** | 28.13 (8.10, 97.75) | 1.86** | 6.45 (2.02, 20.21) |

*Note.* The referent category was: "Did not vote on Issue 1." *** $p < .001$, ** $p < .01$, * $p < .05$

The third model (i.e., considering the role of social distance from self to Ohioans and perceptual bias toward media messages supporting Issue 1 from self to Ohioans in predicting vote on Issue 1) was significant (log likelihood 319.67, $\chi^2 = 426.72$, df = 34, $p < .001$). See Table 3.

Table 3
*Summary of Regression Analysis Considering the Role of Social Distance between Respondents and Ohioans and Perceptual Bias from Self to Ohioans Toward Media Coverage in Support of Issue 1 Predicting Vote on Issue 1*

| | "Yes" Vote on Issue 1 | | "No" Vote on Issue 1 | |
|---|---|---|---|---|
| | *β* | *OR* (95% CI) | *β* | *OR* (95% CI) |

| | | | | |
|---|---|---|---|---|
| Political Affiliation | -.44** | .65 (.46, .91) | -.02 | .98 (.71, 1.34) |
| LOC | -1.12* | .33 (.13, .83) | -.11 | .83 (.40, 2.02) |
| Support Issue 1 | 1.36*** | 3.88 (2.44, 6.40) | -1.06*** | .35 (.23, .54) |
| TV Coverage | -.25 | .78 (.48, 1.28) | .40 | 1.49 (.93, 2.35) |
| Newspaper Coverage | .38 | 1.47 (.89, 2.42) | .39 | 1.48 (.97, 2.40) |
| Radio Coverage | .03 | 1.04 (.66, 1.62) | .03 | 1.03 (.67, 1.59) |
| Social Media Posts | .15 | 1.16 (.75, 1.78) | -.24 | .79 (.53, 1.15) |
| Ads in Favor | .09 | 1.10 (.63, 1.91) | .52* | 1.68 (.99, 2.83) |
| Ads Opposed | .62** | 1.85 (1.14, 2.99) | .04 | 1.04 (.63, 1.70) |
| Message Desirability | -.26 | .77 (.42, 1.43) | -.25 | .78 (.44, 1.38) |
| Social Distance | -.02 | .98 (.59, 1.63) | .11 | 1.12 (.67, 1.87) |
| TPPB - Media | -.84* | .43 (.21, .90) | -.72 | .49 (.22, 1.08) |
| Drug Use - None | .44 | 1.55 (.60, 3.99) | 1.09** | 2.98 (1.25, 7.09) |
| Drug Abuse - None | -.22 | .79 (.25, 2.51) | 1.04 | 2.82 (.63, 12.72) |
| "Yes" Vote on 3 | 3.24*** | 25.43 (7.43, 87.11) | 1.82** | 6.15 (1.96, 19.30) |

*Note.* The referent category was: "Did not vote on Issue 1." $p < .001$, ** $p < .01$, * $p < .05$

Research question 5b sought to examine how the variables, coupled with third-person perceptual bias toward the passage of Issue 1 for each of the comparison groups. The first model (i.e., considering the role of social distance from self to friends/relatives and perceptual bias toward the passing of Issue 1 from self to friends/relatives in predicting vote on Issue 1) was significant (log likelihood 312.92, $\chi^2 = 433.47$, df = 34, $p < .001$). See Table 4.

Table 4

*Summary of Regression Analysis Considering the Role of Social Distance between Respondents and Friends/Relatives and Perceptual Bias from Self to Friends/Relatives Toward the Passing of Issue 1 Predicting Vote on Issue 1*

| | "Yes" Vote on Issue 1 | | "No" Vote on Issue 1 | |
|---|---|---|---|---|
| | *β* | *OR* (95% CI) | *β* | *OR* (95% CI) |
| Political Affiliation | -.41* | .67 (.48, .93) | .01 | 1.01 (.74, 1.38) |
| LOC | -1.42** | .24 (.09, .67) | -.25 | .73 (.32, 1.69) |
| Support Issue 1 | 1.43*** | 4.16 (2.43, 7.13) | -1.18*** | .31 (.20, .48) |
| TV Coverage | -.25 | .78 (.47, 1.28) | .42 | |
| Newspaper Coverage | .33 | 1.39 (.84, 2.29) | .41 | 1.52 (.94, 2.45) |
| Radio Coverage | .10 | 1.10 (.69, 1.76) | .10 | 1.51 (.95, 2.39) |
| Social Media Posts | .18 | 1.20 (.77, 1.88) | -.31 | 1.10 (.71, 1.71) |
| Ads in Favor | .03 | 1.03 (.58, 1.82) | .31 | .73 (.49, 1.09) |
| Ads Opposed | .67** | 1.96 (1.18, 3.27) | .14 | 1.36 (.83, 2.24) |
| Message Desirability | -.35 | .71 (.37, 1.35) | -.14 | 1.15 (.71, 1.86) |
| Social Distance | -.56* | .57 (.36, .91) | .18 | .87 (.49, 1.55) |
| TPPB - Issue 1 Pass | .08 | 1.08 (.67, 1.74) | .70* | 1.20 (.76, 1.89) |
| Drug Use - None | .58 | 1.78 (.66, 4.84) | 1.26** | 2.02 (1.13, 3.61) |
| Drug Abuse - None | -.26 | .77 (.24, 2.51) | 1.48* | 3.52 (1.45, 8.50) |
| "Yes" Vote on 3 | 3.50*** | 32.99 (6.47, 121.05) | 1.80** | 4.39 (.92, 20.90) |
| | | | | 6.06 (1.93, 19.05) |

*Note.* The referent category was: "Did not vote on Issue 1." *** $p < .001$, ** $p < .01$, * $p < .05$

The second model (i.e., considering the role of social distance from self to Ohio voters and perceptual bias toward the passing of Issue 1 from self to Ohio voters in predicting vote on Issue 1) was significant (log likelihood 322.58, $\chi^2 = 423.81$, df = 34, $p < .001$). For the role of each predictor, see Table 5.

Table 5
*Summary of Regression Analysis Considering the Role of Social Distance between Respondents and Ohio Voters and Perceptual Bias from Self to Ohio Voters Toward the Passing of Issue 1 Predicting Vote on Issue 1*

| | "Yes" Vote on Issue 1 | | "No" Vote on Issue 1 | |
|---|---|---|---|---|
| | *β* | *OR* (95% CI) | *β* | *OR* (95% CI) |
| Political Affiliation | -.52*** | .60 (.42, .84) | -.09 | .92 (.67, 1.25) |
| LOC | -1.13** | .32 (.13, .83) | -.24 | .79 (.35, 1.78) |
| Support Issue 1 | 1.36*** | 3.91 (2.30, 6.65) | -1.04*** | .35 (.23, .55) |
| TV Coverage | -.23 | .79 (.49, 1.29) | .37 | 1.45 (.91, 2.31) |
| Newspaper Coverage | .39 | 1.48 (.89, 2.45) | .45* | 1.56 (.99, 2.45) |
| Radio Coverage | .03 | 1.03 (.65, 1.63) | -.01 | 1.010 (.66, 1.57) |
| Social Media Posts | .18 | 1.19 (.77, 1.84) | -.26 | .77 (.52, 1.13) |
| Ads in Favor | .03 | 1.03 (.59, 1.81) | .40 | 1.49 (.90, 2.46) |
| Ads Opposed | .65** | 1.91 (1.16, 3.14) | .09 | 1.09 (.68, 1.77) |
| Message Desirability | -.15 | .86 (.47, 1.58) | -.24 | .79 (.45, 1.38) |
| Social Distance | -.55* | .58 (.31, 1.05) | -.23 | .80 (.49, 1.29) |
| TPPB - Issue 1 Pass | -.01 | .99 (.62, 1.58) | .16 | 1.17 (67, 2.06) |
| Drug Use - None | .51 | 1.67 (.63, 4.40) | 1.09** | 2.98 (1.27, 6.99) |
| Drug Abuse - None | -.06 | .94 (.29, 3.03) | 1.23 | 3.43 (.73, 16.09) |
| "Yes" Vote on 3 | 3.34*** | 25.57 (7.56, 86.45) | 1.88*** | 6.55 (2.10, 20.45) |

*Note.* The referent category was: "Did not vote on Issue 1.". *** $p < .001$, ** $p < .01$, * $p < .05$

The third model (i.e., considering the role of social distance from self to other Ohioans and perceptual bias toward the passing of Issue 1 from self to Ohio voters in predicting vote on Issue 1) was significant (log likelihood 325.91, $\chi^2 = 420.48$, df = 34, $p < .001$). For the role of each predictor, see Table 6.

Table 6
*Summary of Regression Analysis Considering the Role of Social Distance between Respondents and Ohioans and Perceptual Bias from Self to Ohioans Toward the Passing of Issue 1 Predicting Vote on Issue 1*

| | "Yes" Vote on Issue 1 | | "No" Vote on Issue 1 | |
|---|---|---|---|---|
| | B | OR (95% CI) | B | OR (95% CI) |
| Political Affiliation | -.42** | .66 (.47, .92) | -.04 | .96 (.71, 1.31) |
| LOC | -1.09* | .34 (.13, .85) | -.23 | .79 (.35, 1.79) |
| Support Issue 1 | 1.27*** | 3.57 (2.10, 6.08) | -1.04*** | .35 (.23, .55) |
| TV Coverage | -.19 | .82 (.51, 1.33) | .40 | 1.49 (.94, 2.36) |
| Newspaper Coverage | .40 | 1.49 (.91, 2.46) | .43 | 1.54 (.98, 2.43) |
| Radio Coverage | .08 | 1.08 (.70, 1.68) | .04 | 1.04 (.68, 1.60 |
| Social Media Posts | .14 | 1.15 (.75, 1.76) | -.27 | .77 (.52, 1.13) |

| | | | | |
|---|---|---|---|---|
| Ads in Favor | -.03 | .97 (.57, 1.68) | .37 | 1.45 (.88, 2.40) |
| Ads Opposed | .59** | 1.80 (1.12, 2.90) | .09 | 1.10 (.68, 1.78) |
| Message Desirability | -.12 | .88 (.48, 1.64) | -.23 | .79 (.45, 1.40) |
| Social Distance | -.01 | .99 (.59, 1.66) | .08 | 1.08 (.65, 1.81) |
| TPPB - Issue 1 Pass | .14 | 1.15 (.73, 1.80) | .13 | 1.14 (.68, 1.92) |
| Drug Use - None | .51 | 1.67 (.65, 4.34) | 1.13** | 3.09 (1.30, 7.31) |
| Drug Abuse - None | -.03 | .97 (.31, 3.06) | 1.01 | 3.01 (.66, 13.77) |
| "Yes" Vote on 3 | 3.21*** | 22.31 (6.74, 73.87) | 1.80** | 6.04 (1.96, 18.66) |

*Note.* The referent category was: "Did not vote on Issue 1." *** $p < .001$, ** $p < .01$, * $p < .05$

## Discussion

Our findings suggest that there are applications for the Third-Person Effect Hypothesis (Davison, 1983) that include perceptual biases and behavioral effects that extend beyond reactions to purely media content. In fact, our respondents not only indicated third-person perceptual biases toward media coverage of/in support for Issue 1, but also exhibited these biases toward a hypothetical passage of the issue. While perceptual biases were not always significant predictors of vote on Issue 1, there was at least one circumstance: as it pertained to the hypothetical passage of Issue 1 when considering friends and relatives. We found that, in this circumstance, the more perceptual bias respondents indicated for Issue 1 passing, the more likely they were to have cast a "no" vote. This makes sense, as respondents likely felt an obligation to vote in a way to protect their friends and relatives from being greatly affected by passage and would be in line with past findings (e.g., Golan, Banning, & Lundy, 2009; Griswold, 1992; Liu & Lo, 2014). This effect could be a two-fold protective measure in that one could be concerned about protecting their friends and relatives (and even themselves) from other drug users and abusers who would get off "scot-free," or they could have been concerned for their own friends/relatives who are drug users/abusers who could be put out on the street with a slap on the wrist. Perhaps respondents felt that felonies and jail are acceptable options if they protect a loved one from continuing to use drugs and/or overdose. As a Clinton County Municipal Judge wrote in an op-ed piece endorsing a "no" vote on Issue 1 when referencing a conversation with a woman about her addicted granddaughter:

> Ohio Issue 1 on the Nov. 6 ballot takes away my ability to keep her granddaughter alive. If it passes, I lose the ability to hold her in jail long enough to find her a rehab. If it passes, when she is caught with fentanyl, the police have to give her a ticket and wish her good luck. They cannot arrest her. They have to leave her there — probably to use again, and probably to die. (Daugherty, 2018, para. 5-7)

This underscores a concern that an addict would be on their own had the Issue passed.

Also considering perceptual bias toward the passing of Issue 1, support for the issue, coupled with self-reported drug use and/or and abuse (plus exposure to media coverage in some cases) played a significant role. This, too, makes sense in that those who used and/or abused drugs were more likely to support this Issue and experience perceptual biases toward its passage because they favored alternatives to felonies and incarceration if they were caught.

Likewise, there were other notable predictors of perceptual bias as it pertained to media exposure to coverage of Issue 1, and these were consistent with previous research (e.g., Lee & Park, 2016; Rojas, 2010; Wei, Lo, Lu, & Hou, 2015; Wei, Lo, & Lu, 2010; Wei, Lo, & Lu, 2008). Exposure to media (namely social media and newspapers) and support were major predictors; newspapers were a likely impetus for this bias perhaps because people read op-eds such as the one noted above, and members of the legislature and judiciary wrote opposition pieces arguing that reducing sentences reduced the chance of protecting abusers from themselves. Social media was also a likely catalyst for experiencing perceptual biases because it is such a popular news source for people, and one could not escape posts about Issue 1 –

particularly because one of its biggest supporters and financers is a foundation started by social media mogul Mark Zuckerberg (Ballotpedia, 2018).

In addition, specifically considering self-to-Ohioans, respondents indicating third-person perceptual bias as it pertained to "anti-Issue 1" media messages were more likely to turn out to vote "yes." This suggests that despite the large amount of advertising dollars invested in "pro-Issue 1" messages (Ballotpedia, 2018), these people felt that other Ohioans in general would either remain opposed to the Issue or would be influenced in some way by the ads, so they likely cast a "yes" vote to offset them, which is consistent with previous findings (e.g., Liu & Lo, 2014).

It is important to discuss with greater specificity other factors that contributed to respondents' vote on Issue 1, of which the majority was no – albeit the margin was closer, likely because of the preponderance of voters who reported living in the "ground zero" areas. These people were more likely to experience the epidemic first-hand and may have felt desperation. Still, lawmakers may not have appropriately this desperation in crafting this piece of legislation. As a City Councilperson who serves in "ground zero" put it, when it comes to statewide ballot issues, legislation is "written in the best interest of the authors," which suggests that authors end up piling too many provisions into one piece of proposed law. This "kitchen sink" issue was a problem much like the monopoly issue in Issue 3, which was viewed as the least favorable provision of that Issue (Saker, 2015; Wagstaff & Knopf, 2017). Perhaps disagreement with even portions of provisions of legislation is sufficient in motivating overall opposition. In our study, the least favorable provisions had to do with conversion of offenses from misdemeanors to felonies and sentence reductions, both of which made offenses and their consequences less severe. Perhaps this also explains why voting on Issue 3 was among the top 3 (also voting for Governor and voting in the Midterm House and Senate elections) most important reasons respondents indicated they voted in November 2018.

Likewise, it is also important to note that we found support for other factors that are consistently examined in third-person effect research. Message desirability ratings of media coverage of support or ads in support were low – and lower for respondents themselves when considering the three comparison groups. This is certainly not surprising given that the large amount of money spent on advertising (and respondents' indications of exposure) meant that respondents were exposed to a lot of these ads. This, of course, leads to perceptual biases and behaviors as a result of these perceptions. We also found that political affiliation (i.e., conservativism), internal locus of control, support for 1, media exposure, social distance, and vote on Issue 3 were important predictors of vote on Issue 1 in most models. These also make sense in explaining a multifaceted model for predicting vote: conservative people who believe they have more control over their lives, were exposed to media messages about the Issue, who feel dissimilar to other constituent groups, and who opposed Issue 3 would be more likely to oppose other legislation that would allow for "out of control" individuals to escape harsher punishment for drug use and abuse.

## Limitations and Future Research

Despite the notable findings of this study, it does not come without limitations. First, the sample consisted of respondents connected – albeit even tangentially – somehow to the authors' networks, predominantly in rural parts of southwest Ohio, and predominantly Caucasian. Nevertheless, this is the area where the opioid epidemic has hit Ohio the hardest. Future research should consider ways to expand the geographical spread and diversity of respondents.

In addition, the survey was quite lengthy – analytics suggest it took about 10-15 minutes to complete. To reduce its size, we eliminated and/or reduced several measures to help to make the survey length manageable. Thus, we may have missed important factors that should be considered in future research about drug use, drug addiction, punishment, and treatment. Finally, surveys, particularly those involving taboo subjects carry a risk of soliciting partial or dishonest responses. We took much care to protect respondents, but some may have remained skeptical.

In addition to the aforementioned suggestions, future research on this topic should also expand into other facets of drug-related issues and legislation. Applying this to other election issue settings

including drug-related state issues in other states and other ballot initiatives that change state constitutions and parsing out marijuana from other drugs would provide important theoretical and practical implications for scholars and legislators. Likewise, investigating the role that media exposure via a variety of outlets would also be useful in contributing to our understanding of how media messages impact their audiences, particularly those who seek (directly or indirectly) information to guide their voting decisions.

**Acknowledgments**: Thank you to the following contributors: Jack Coates, Hannah Davis, Jake DeHart, Ryan Honomichl, and Matt Purkey.

## References


ACLU of Ohio and Ohio Justice & Policy Center. (2016). Looking forward: A comprehensive plan for criminal justice reform in Ohio. Cleveland, Ohio. Retrieved March 31, 2019, from: http://www.acluohio.org/wp-content/uploads/2016/03/LookingForward2016_03.pdf

Andsager, J. L., & White, H. A. (2007). *Self versus others: Media, messages, and the third-person effect.* Mahwah, NJ: Erlbaum.

Ballotopedia (2018). Ohio Issue 1: Drug and criminal policies initiative. Retrieved January 14, 2019, from: https://ballotpedia.org/Ohio_Issue_1,_Drug_and_Criminal_Justice_Policies_Initiative_(2018)

Borchardt, K. (2018). Facebook founders among backers of Ohio criminal justice reform amendment. Cleveland.com Retrieved March 26, 2019, from: https://www.cleveland.com/metro/2018/08/facebook_founders_among_backer.html

Centers for Disease Control and Prevention (2018). Drug overdose deaths [online]. Retrieved April 8, 2019, from: https://www.cdc.gov/drugoverdose/data/statedeaths.html

Cohen, J., & Davis, R. G. (1991). Third-person effects and the differential impact in negative political advertising. *Journalism Quarterly*, *68,* 680-688.

Cohen, J., Mutz, D., Price, V., & Gunther, A. (1998). Perceived impact of defamation: An experiment on third-person effects. *Public Opinion Quarterly, 52*, 161-173.

Cohen, J., & Tsfati, Y. (2009). The influence of presumed media influence on strategic voting. *Communication Research, 36*, 359-378.

Conners, J. L. (2005). Understanding the third-person effect. *A Quarterly Review of Communication Research, 24*(2), 2-22.

Daugherty, (2018, October). Why I voted 'no' on Ohio Issue 1. Wilmington News-Journal [online]. Retrieved March 27, 2019, from: https://www.wnewsj.com/opinion/columns/88179/why-i-voted-no-on-ohio-issue-1

Davison, W. P. (1983). The third-person effect in communication. *Public Opinion Quarterly, 47*, 1-15.

Drug Enforcement Administration (n.d.). The DEA years (history). Retrieved April 8, 2019, from: https://www.dea.gov/sites/default/files/2018-07/1970-1975%20p%2030-39.pdf

Duke, S. B. (2010). Mass imprisonment, crime rates, and the drug war: A penological and humanitarian disgrace. *Yale Law Faculty Scholarship Series*. http://digitalcommons.law.yale.edu/fss_papers/826

Eveland, Jr., W. P., & McLeod, D. M. (1999). The effect of social desirability on perceived media impact: Implications for third-person perceptions. *International Journal of Public Opinion Research, 11*, 315-333.

Eveland, W. P., Jr., Nathanson, A. I., Detenber, B. H., & McLeod, D. M. (1999). Rethinking the social distance corollary: Perceived likelihood of exposure and the third-person perception. *Communication Research, 26*, 275-302.

Gardikiotis, A. (2008). Group distinctiveness, political identification, and the third-person effect: Perceptions of a political campaign in the 2004 Greek national election. *Media Psychology, 11*, 331-353.

Golan, G., Banning, S., & Lundy, L. (2008). Likelihood to vote, candidate choice, and the third-person effect. *American Behavioral Scientist, 52*, 278-290. 10.1177/0002764208321356.

Govaki, M. (2018, October). Ohio chief justice explains opposition to Issue 1. *Dayton Daily* News [online]. Retrieved March 6, 2019, from: https://www.daytondailynews.com/news/crime--law/ohio-chief-justice-explains-opposition-state-issue/Aq5211Iady36XghTJVDRHP/

Glunt, N. (2015, February). Drugs causing rural, suburban Ohio counties to send more to prison than urban counties. *Medina County Gazette* [online]. Retrieved February 4, 2019, from: http://www.medina-gazette.com/Cities/2015/02/23/Drugs-causing-rural-suburban-Ohio-counties-to-send-more-to-prison-than-urban-counties.html

Griswold, W. F. (1992). Third-person effect and voting intentions in a presidential primary election. Paper presented at the annual meeting of the Association for Education in Journalism and Mass Communication, Montreal, Canada.

Gunther, A. C. (1991). What we think others think: Cause and consequence in the third-person effect. *Communication Research, 18*, 355-372.

Gunther, A. C., (1995). Overrating the X-rating: The third-person perception and support for censorship of pornography. *Journal of Communication, 45*, 21-39.

Gunther, A. C., & Mundy, P. (1993). Biased optimism and the third-person effect. *Journalism Quarterly, 70*, 2-11.

Gunther, A. C., & Thorson, E. (1992). Perceived persuasive effects of product commercials and public service announcements: Third person effects in new domains. *Communication Research, 19*, 574-596.

Haridakis, P., & Hanson, G. (2009). Social interaction and co-viewing with YouTube: Blending mass communication reception and social connection. *Journal of Broadcasting & Electronic Media, 53*, 317-335.

Haridakis, P. M., & Rubin, A. M. (2005). Third-person effects in the aftermath of terrorism. *Mass Communication & Society, 8*, 39-59.

Hitchon, J. C.; Chang, C., & Harris, R. (1997). Should women emote? Perceptual bias and opinion change in response to political ads for candidates of different genders. *Political Communication*, 14, 49-70.

Hong, C., & Riffe, D. (2008). Attention, perception, and perceived Effects: Negative political advertising in a battleground state of the 2004 presidential election. *Mass Communication and Society, 11*, 177-196.

Johansson, B. (2015). The third-person effect: Only a media perception? *Nordicom Review*, *26*(1), 81-94. doi: https://doi.org/10.1515/nor-2017-0248

Kim, H. (2016). The role of emotions and culture in the third-person effect process of news coverage of election poll results. *Communication Research*, *43*, 109–130. https://doi.org/10.1177/0093650214558252

Klapper, J. T. (1960). *Effects of mass communication.* New York: Free Press.

Lasorsa, D. L. (1989). Real and perceived effects of 'Amerika.' *Journalism Quarterly, 66*, 373-378.

Lee, H., & Park, S.A. (2016). Third-person effect and pandemic flu: The role of severity, self-efficacy method mentions, and message source. *Journal of Health Communication, 21*, 1244-1250.

Levenson, H. (1974). Activism and powerful others: Distinctions within the concepts of internal-external control. *Journal of Personality Assessment, 38*, 377–383.Lindbloom, G., & Faw, T. T. (1982). Three measures of locus of control: What do they measure? *Journal of Personality Assessment, 46*, 70-71.

Liu, X. & Lo, V. (2014) Media exposure, perceived personal impact, and third-person effect, *Media Psychology, 17*, 378-396. doi: 10.1080/15213269.2013.826587

Lo, V., & Paddon, A. R. (1999). Third-person perception and support for pornography restrictions: Some methodological problems. *International Journal of Public Opinion Research, 12*, 80-89.

Maddux, J. E. (Ed.) (1995). *Self-efficacy, adaptation, and adjustment: Theory, research, and application.* New York: Springer.

Milligan Stammen, K. (2017). Drug crisis comes to rural Ohio. Ohio Farm Bureau [online]. Retrieved March 8, 2019, from: https://ofbf.org/2017/06/29/drug-crisis-comes-rural-ohio/

Musto, D. F. (1996) Institute of Medicine (U.S.) Committee on Opportunities in Drug Abuse Research. *Pathways of addiction: Opportunities in drug abuse research.* Washington (DC): National Academies Press (US); 1996. B, Drug Abuse Research in Historical Perspective. Available from: https://www.ncbi.nlm.nih.gov/books/NBK232965

O'Connor, M. (2018, August 30). Chief Justice O'Connor cites 'catastrophic' effects if state Issue 1 passes this fall. *Court News Ohio.* Retrieved December 9, 2019, from: http://www.courtnewsohio.gov/bench/2018/issueOne_083018.asp#.Xe6O2uhKjcc

Ohio Attorney General (2017, December 1). "The neighborhood safety, drug treatment, and rehabilitation amendment summary petition." Retrieved November 25, 2019, from: https://www.ohioattorneygeneral.gov/getattachment/f03dd0d1-6498-4e96-a80c-8908a899989b/The-Neighborhood-Safety-Drug-Treatment-and-Rehab.aspx

Ohio Department of Health (2016). Epidemic of prescription drug overdose in Ohio. Retrieved March 8, 2019, from: https://odh.ohio.gov/wps/wcm/connect/gov/5a0bbf8a-8d88-49e5-bd6c-56ca28c2104c/Epidemic_of_Prescription_Drug_Overdose_Ohio_Report.pdf?MOD=AJPERES&CONVERT_TO=url&CACHEID=ROOTWORKSPACE.Z18_M1HGGIK0N0JO00QO9DDDDM3000-5a0bbf8a-8d88-49e5-bd6c-56ca28c2104c-miUpbk3

Ohio Legislature (2016). House Bill 523. Retrieved March 26, 2019, from: https://www.legislature.ohio.gov/legislation/legislation-summary?id=GA131-HB-523

Ohio Secretary of State (2018). Statewide issue. Retrieved January 14, 2019, from: https://www.sos.state.oh.us/globalassets/ballotboard/2018/2018issuesreport.pdf

Paek, H., Pan, Z., Sun, Y., Abisaid, J., & Houden, D. (2005). The third-person perception as social judgement: An exploration of social distance and uncertainty in perceived effects of political attack ads. *Communication Research, 32*, 143-170.

Pan, Z., & L. Abisaid, J., & Paek, H., Sun, Y., & Houden, D. (2006). Exploring the perceptual gap in perceived effects of media reports of opinion polls. *International Journal of Public Opinion Research, 18,* 340-350. 10.1093/ijpor/edh103.

Paul, B., Salwen, M. B., & Dupagne, M. (2000). The third-person effect: A meta-analysis of 148 the perceptual hypothesis. *Mass Communication and Society, 3*, 57-85.

Paul, B., Salwen, M. B., & Dupagne, M. (2013). The third-person effect: A meta-analysis of the perceptual hypothesis. In R.W. Preiss, B.M. Gayle, N. Burrell, M. Allen, J. Bryant (Eds.) *Mass media effects research: Advances through meta-analysis* (pp. 81-102). New York: Taylor & Francis.

Peiser, W., & Peter, J. (2000). Third-person perception of television-viewing behavior. *Journal of Communication,* 50, 25-45.

Perloff, R. M. (1989). Ego involvement and the third-person effect of televised news coverage. Communication Research, 16, 236-262.

Perloff, R. M. (1993). Third-person effect research 1982-1992: A review and synthesis. *International Journal of Public Opinion Research, 5*, 167-184.

Perloff, R. M. (1999). The third-person effect: A critical review and synthesis. *Media Psychology*, 353-379.

Perloff, R. M. (2002). The third-person effect. In J. Bryant & D. Zillmann (Eds.), *Media effects: Advances in theory and research* (2nd ed.) (pp. 489–506). Mahwah, NJ: Erlbaum.

Price, V., & Stroud, N. J. (2006). Public attitudes towards polls: Evidence from the 2000 U. S. presidential election. *International Journal of Public Opinion Research, 18,* 393-421.

Rojas, H. (2010). "Corrective" actions in the public sphere: How perceptions of media and media effects shape political behaviors. *International Journal of Public Opinion Research*, *22*, 343-363.

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs, 80*, 1-28.

Rubin, A. M. (1993). The effect of locus of control on communication motivation, anxiety, and satisfaction. *Communication Quarterly, 41*, 161-171.

Rucinski, D., & Salmon, C. T. (1990). The "other" as the vulnerable voter: A study of the third-person effect in the 1988 presidential campaign. *International Journal of Public Opinion Research, 2*, 345-368.

Saker, A. (2015, November). 6 reasons marijuana failed in Ohio. *USA Today* [online]. Retrieved February 14, 2019, from: https://www.usatoday.com/story/news/politics/2015/11/04/6-reasons-ohio-marijuana-legalization-failed/75143764/

Salwen, M. B. (1998). Perceptions of media influence and support for censorship: The third-person effect in the 1996 presidential election. *Communication Research, 25*, 259-285.

Stratford, S. (2018). Ohio Issue 1 addresses fighting drug epidemic, receives mixed response from legislators. Retrieved December 9, 2019, from: https://fox8.com/2018/09/28/ohio-issue-1-addresses-fighting-drug-epidemic-receiving-mixed-response-from-legislators/

Sun, Y., Shen, L., & Pan, Z. (2008). On the behavioral component of the third-person effect. *Communication Research*, *35*, 257-278. https://doi.org/10.1177/0093650207313167

Tiedge, J. T., Silverblatt, A., Havice, M. J., & Rosenfeld, R. (1991). Discrepancy between perceived first-person and perceived third-person mass media effects. *Journalism Quarterly, 68*(1), 141-154

Vallone, R. P., Ross, L., & Lepper, M. R. (1985). The hostile media phenomenon: Biased perception and perceptions of media bias in coverage of the Beirut massacre. *Journal of Personality and Social Psychology, 49*, 577-585.

Wagstaff, A. E., & Knopf, T. (2017). "Up in smoke": Shaping attitudes toward legalizing marijuana in Ohio. *Ohio Communication Journal, 55*, 64-83.

Wedd, A. (2015). Drug crimes: Reported to the Ohio incident-based reporting network, 2004-2014. Retrieved February 1, 2018, from: https://s3.amazonaws.com/odx-odps-content/links/ocjs_DrugCrimesReportedOIBRS2016.pdf

Wedell, L. (2018, August). Montgomery County number one in state for overdose deaths per capita. Dayton Daily News [online]. Retrieved April 8, 2019, from: https://www.daytondailynews.com/news/local/montgomery-county-number-one-state-for-overdose-deaths-per-capita/XvqKfvgvAjyuKR9FzwsNAJ/

Wei, R. & Lo, V. (2007). The third-person effect of political attack ads in the 2004 U.S. presidential election. *Media Psychology, 9,* 367-388.

Wei, R., Lo, V., & Lu, H. (2008). Third-person effects of health news: Exploring the relationships among media exposure, presumed media influence, and behavioral intentions. *American Behavioral Scientist, 52*, 261–277. https://doi.org/10.1177/0002764208321355

Wei, R., Lo, V., & Lu, H. (2010). The third-person effect of tainted food product recall news: Examining the role of credibility, attention, and elaboration for college students in Taiwan. *Journalism & Mass Communication Quarterly, 87,* 598-614.

Wei, R., Lo, V., & Lu, H. (2011). Examining the perceptual gap and behavioral intention in the perceived effects of polling news in the 2008 Taiwan presidential election. *Communication Research*, *38,* 206-227. doi:10.1177/0093650210365536

Wei, R. Lo, V., Lu, H. & Hou, H. (2015). Examining multiple behavioral effects of third-person perception: Evidence from the news about Fukushima nuclear crisis in Taiwan. *Chinese Journal of Communication, 8,* 95-111, doi: 10.1080/17544750.2014.972422

White, H. A. (1997). Considering interacting factors in the third-person effect: Argument strength and social distance. *Journalism & Mass Communication Quarterly, 74*, 557-564.

Xu, J., & Gonzenbach, J. (2008). Does a perceptual discrepancy lead to action? A meta-analysis of the behavioral component of the third-person effect. *International Journal of Public Opinion Research, 20*, 375-385.

Zezima, K. (2018, December), Congressional report: Drug companies, DEA failed to stop flow of millions of opioid pills. *Washington Post* [online]. Retrieved February 1, 2019, from: https://www.washingtonpost.com/national/congressional-report-drug-companies-dea-failed-to-stop-flow-of-millions-of-opioid-pills/2018/12/18/5bc750ee-0300-11e9-b6a9-0aa5c2fcc9e4_story.html?noredirect=on&utm_term=.e4097ba6cc75