Why *Thirteen Reasons Why* may Elicit Suicidal Ideation in Some Viewers, but Help Others

Anna S. Mueller
Department of Sociology & Comparative Human Development
University of Chicago

Address: 1126 East 59th Street, Office 103, University of Chicago, Chicago, IL, 60637, United States.

Email Address: Amueller@uchicago.edu (or Mueller1@IU.edu)

Why *Thirteen Reasons Why* may Elicit Suicidal Ideation in Some Viewers, but Help Others

Abstract: When the popular Netflix series *13 Reasons Why (13RW)* debuted scholars were quick to raise concerns that the show may encourage suicide as an option, particularly for vulnerable audience members; however, others pushed back, noting that the evidence used to draw a link between exposure to media and actual suicide risk suffers from methodological weaknesses and that censoring mental health topics may do more harm than good. The problem highlighted by the debate is that researchers generally lack the kinds of studies that would truly help us understand if a show like *13RW* is problematic, and if it is, which specific storylines carry risk. Indeed, this general lack of the empirical evidence is precisely why the study by Arendt and his colleagues (2019) in this issue makes such an important contribution to the literature. With this commentary, I (1) review what we know and what we don't about the media, *13RW,* and suicide, (2) discuss Arendt et al.'s unique insights, and (3) outline an agenda for future research that will allow us to better answer how, when, and for whom exposure to media stories like *13RW* harms – or helps - youth.

Why *Thirteen Reasons Why* may Elicit Suicidal Ideation in Some Viewers, but

Help Others

In March 2017, Netflix released the series *13 Reasons Why (13RW),* which is based on a young adult novel by the same name (Asher 2007). In season 1, the show focuses on the story of Hannah Baker's suicide which is told through flashbacks to her life guided by 13 cassette tapes that comprise her elaborate suicide note. Her reasons largely center on the cruel treatment she received from her peers (including bullying, gossip, slut shaming, and sexual assault), but they also include Hannah's own guilt over her own (in)actions. Season 2 explores similar themes (grief, loss, suicide, sexual assault), but school shootings also feature heavily. Ultimately, the show reveals a complex adolescent world full of pain and trauma and devoid of adults who get it or are capable of helping. Whether this depicts reality or not is almost irrelevant. The show is popular, suggesting that it speak to some important element of youth's experience today (Lauricella et al., 2018).

Though popular, the show is also quite controversial. Scholars were quick to raise concerns that the show may encourage suicide as an option, particularly for vulnerable audience members (e.g., American Association of Suicidology, 2017). However, others pushed back, pointing out that the evidence used to draw a link between exposure to media and actual suicide risk suffers from methodological weaknesses (e.g., Ferguson, 2018) and that censoring mental health topics may do more harm than good (e.g., Scalvini & Rigamonti, 2017). The problem highlighted by the debate is that researchers generally lack the kinds of studies that would truly

help us understand if a show like *13RW* is problematic, and if it is, which specific elements carry risk. Indeed, this lack of informative empirical evidence is precisely why the study by Arendt and his colleagues (2019) makes such an important contribution to the literature. However, before commenting on the study in any detail, it is useful to review what we know about the media's role in suicide.

The Case for Concern

The notion that exposure to stories about suicide can trigger suicide dates back centuries, at least to Goethe's novel *The Sorrows of Young Werther,* which purportedly triggered outbreaks of suicides (Phillips, 1974). Since the 1970s, researchers have repeatedly examined whether suicide can indeed be "suggested" through exposure and whether these effects (dubbed "Werther" effects) are real. While the evidence is mixed, particularly for fictional stories about suicide (see Pirkis and Blood, 2001; Stack, 2005), there is enough evidence that media stories trigger - under certain circumstances - spikes in local suicide rates to warrant serious concern (Niederkrotenthaler et al., 2012).

There are two findings from this literature that are particularly relevant to *13RW*. First, how media stories about suicide are told seems to matter substantially to whether the story triggers an increase – or a decrease – in suicide rates (see Niederkrotenthaler et al., 2010). High profile or sensationalized stories are often associated with increases in suicide rates, while stories about suicidal individuals finding a different way to cope with despair (other than suicide) can trigger decreases. Second, identification with the suicide role model appears to matter (Stack, 2005). For example, suicide rates among groups of people who are similar

(e.g., age group, sex) to the person depicted in the media-reported suicide are more likely to experience a spike than groups of dissimilar individuals (Niederkrotenthaler et al., 2009). Of course, these studies rely on aggregate data and thus must assume that the patterns are due to identification with the person who died.

Taken together these literatures do suggest reasons to be concerned about *13RW*. Since *13RW* depicts suicide as a means for coping with psychological pain (whether that was Netflix's intent or not) in a very compelling way, it could be in a position to trigger Werther effects and harm youth, particularly for youth who identify with the plight of Hannah Baker.

The Case for Caution

Despite the substantial literature on media and suicide, the majority of these studies have methodological limitations that generally result from the use of aggregate ecological data (Pirkis and Blood 2001). Essentially, because we are examining the association between exposure to a media articles and population-level suicide rates, we cannot know for sure that the individuals who died by suicide following a media article's publication actually read that article or that the article was responsible for their death. With aggregate data, we also have no ability to control for important individual risk factors for suicide that may be the true causal factors associated with an individual's death, even if they also read a media story about suicide. This limits our ability to make causal claims about the role of media in suicide deaths and undermines our ability to be confident that *13RW* is harmful for youth.

What we know about the Effect of *13RW*

Given the public health outcry and the limits of existing research, many scholars have rushed to examine the effect of *13RW*. Studies have shown that google searches for "how to commit suicide" and for "suicide hotline number" (and the like) increased significantly in the two weeks following the first season's release (Ayers et al., 2017). Messages to the Crisis Text Line also increased during this period (though then inexplicably decreased significantly for awhile) (Thompson et al., 2019). Finally, Cooper et al. (2018) found that admissions due to self-harm at a children's hospital increased significantly after *13RW* aired. Collectively these studies suggest that *13RW* may have increased distress among some viewers, but perhaps also increased help-seeking, at least for a time.

Studies have also interviewed individuals or conducted cross-sectional surveys with convenience samples to evaluate the effect of the show on mental health. They have found worsening mental health after watching the show, particularly among individuals with poor mental health or self-reported suicidality (da Rosa et al., 2019; Hong et al., 2019; Till et al., 2019). However, Lauricella et al. (2018) found that the majority of their adolescent and young adults respondents felt that the show was beneficial for them and others to watch; that it encouraged them to seek out information about difficult topics including suicide, bullying, and sexual assault; that it encouraged them to be kinder; and that they felt more willing to help someone who was struggling. These findings not only reveal possible benefits from exposure to the show, but they also highlight that *13RW* is about much more than just suicide.

Of course, collectively all of these studies suffer from similar methodological limitations as past research on media and suicide. The survey and interview studies only include individuals who watched the show, which limits our ability to understand why people watch the show and how people who watch may be inherently different than people who do not. They also rely on either aggregate ecological data (Ayers et al., 2017; Cooper et al., 2018; Thompson et al., 2019) or cross-sectional data (da Rosa et al., 2019; Lauricella et al., 2018; Till et al., 2019), both of which limit our ability to identify causal effects.

The Contributions of Arendt et al. (2019)

One of the unique contributions of the study by Arendt, et al., (2019) (also published in this issue) is that they address these methodological limitations by (1) collecting longitudinal survey data and (2) including individuals with different levels of exposure to *13RW* (including a group who haven't watched the show at all). Wave 1 of data collection occurred shortly before the release of Season 2 of *13RW*, and Wave 2 followed 4 weeks later. They then use multiple causal modeling strategies to correct (to the extent possible with survey data) for selection effects.

Interestingly, Arendt et al. (2019) find important differences in the effect of *13RW* on young adults once their pre-existing risk factors are taken into account. First, holding time 1 suicidality constant, they do find a group of young adults for whom exposure to *13RW* harms their mental health: specifically, individuals who watched some, but not all of the second season. Somewhat surprising, the authors also find that individuals who watched all of Season 2, on average, had better mental health than individuals who watched none at all (net of their time 1 suicidality).

They also found that individuals who watched the full Season 2 were more willing to help a person in a suicidal crisis than individuals who watched none or some of the show, suggesting that watching the full season may help build empathy. Finally, the study found that students are a category that is at higher risk of suicide ideation, who also benefit disproportionately from watching the entire show, raising questions about what is happening to students these days.

The study isn't perfect. The sample is not random, and the survey focuses on exposure to suicide neglecting other traumatic elements of *13RW* (e.g., sexual assault, school shootings). For example, the authors do not include survey items assessing whether respondents have experienced sexual assault in their models. This is an important omission since exposure to graphic sexual assault scenes instead of suicide may be why young adults opted to stop watching and why the show harmed their mental health. This mechanism would be distinct from suicide suggestion or Werther Effects, which theorize that increased vulnerability to suicide results specifically from exposure to someone role-modeling suicide as an option. To the extent that we care about *how* exposure to media stories changes young adults' mental health, this omission matters. Finally, though the study observes an immediate decline in some viewers' mental health, the study cannot tell us how long these harmful effects last. And since the study focuses on young adults, we cannot know if younger adolescents may react differently.

Still, their findings offer the strongest evidence to date that *13RW* can harm some youth and raise intriguing findings demonstrating that it may actually help

others; something rarely considered in the literature. It also has important implications for what scholars should turn to next.

Future Directions

Elucidating Suicide Suggestion

Arendt et al. (2019) provide further evidence that suicide can be suggested through social exposure; something a significant body of literature has found when considering exposure to suicide via personal role models (like friends and family) (Abrutyn & Mueller, 2014; Maple et al., 2017; Mueller & Abrutyn, 2015; Randall et al., 2015). While research should continue to probe whether this effect is causal, we should also turn our attention to unpacking how exposure to suicide – whether through media or a personal relationship – transforms an individual's vulnerability to suicide (Abrutyn et al., 2019; Blood & Pirkis, 2001; Mueller, 2017). Scholars often theorize that suicide can be socially learned via exposure, but rigorous empirical studies of the social-learning process are extremely limited. Thus, all theoretical mechanisms – such as visibility of, identification with, or admiration of the suicide role model – would benefit from empirical evaluation. Additionally, recent research suggests that focusing on how exposure to suicide shapes people's understanding of motives for suicide may be fruitful (Abrutyn et al., 2019). Though our understanding of suicide in the U.S. is highly medicalized (Marsh 2010), motives for suicide can be diverse (Parkar et al., 2012; Zayas et al., 2010) and beliefs about them can reflect local cultural understandings of suicide (e.g., Kitanaka, 2008) and personal experiences with suicide (Abrutyn et al., 2019). Finally, research should examine how the context of the exposure to suicide shapes suggestion. Some research

suggests that exposure to the grief of others can ameliorate vulnerability to suicide after exposure to suicide (Brent et al., 1993). In short, since sufficient evidence indicates that exposure to suicide matters, via the media or in real life, our obligation is to unpack why so that we can improve (1) our ability to craft safer media stories about suicide and mental health and (2) better suicide prevention/postvention strategies. However, as we probe how risk after exposure emerges, we should take care to remain open to potential positive or protective effects of exposure to suicide (like Arendt et al. [2019]).

Art Imitating Life: Youth in Crisis?

While we elucidate suicide suggestion, we should also consider other, related but often neglected research questions. *13RW* resonates with youth (Lauricella et al., 2018). Why is this? *13RW* is unique in that it takes youth's lives and troubles seriously. It also provides a powerful indictment of toxic masculinity, allows us to feel the fear of a school shooting, the trauma of sexual assault, and the power of friends and kindness. The show also role models positive behaviors, like how to obtain sexual consent without killing the mood. Kids today are dealing with a lot. In the U.S., we've seen substantial increases in suicide (Curtin et al., 2016), suicidality, and depression (Twenge et al., 2019) among school-aged youth. Thus, as we turn our lens to understanding how shows like *13RW* may harm youth, we should also devote serious effort to examining why it resonates and what we might do to make youth's "real" lives better. Indeed, one critique of the link between media coverage of suicide and suicide risk is that in some instances the media may be a proxy for

something that is happening in the everyday lives of youth with or without media coverage (Mueller 2017).

To conclude, understanding the impact of shows like *13RW* is pressing, not only because youth's wellbeing may be at stake, but also because doing so allows us to better understand how, when, and for whom, exposure to suicide amplifies vulnerability to suicide; an important research challenge (Abrutyn et al. 2019). This is a methodologically complex task as ideal secondary data rarely exists and experiments are often (but not always) ethically unfeasible (see Arendt et al., 2016). As such, one of the greatest contributions of Arendt et al. (2019) may be how they inspire methodological innovation by role-modeling their creative and rigorous approach to examining pressing questions surrounding the effect of media stories on suicide.

REFERENCES

Abrutyn, S., & Mueller, A.S. (2014). Are suicidal behaviors contagious in adolescence? Using longitudinal data to examine suicide suggestion. *American sociological review,* 79, 211-227.

Abrutyn, S., Mueller, A.S., & Osborne, M. (2019). Rekeying Cultural Scripts for Youth Suicide: How Social Networks Facilitate Suicide Diffusion and Suicide Clusters Following Exposure to Suicide. *Society & Mental Health,* Online First, 2156869319834063.

American Association of Suicidology. (2017). American Association of Suicidology Responds to "13 Reasons Why". Washington, DC: American Association of Suicidology.

Arendt, F., Till, B., & Niederkrotenthaler, T. (2016). Effects of Suicide Awareness Material on Implicit Suicide Cognition: A Laboratory Experiment. *Health Communication,* 31, 718-726.

Asher, J. (2007). *Thirteen Reasons Why*. USA: Razorbill.

Ayers, J.W., Althouse, B.M., Leas, E.C., Dredze, M., & Allem, J.-P. (2017). Internet Searches for Suicide Following the Release of 13 Reasons Why. *JAMA Internal Medicine,* 177, 1527-1529.

Blood, R.W., & Pirkis, J. (2001). Suicide and the media: Part III. Theoretical issues. *Crisis: The Journal of Crisis Intervention and Suicide Prevention,* 22, 163.

Brent, D.A., Perper, J.A., Mortiz, G., Allman, C., Schweers, J., Roth, C., et al. (1993). Psychiatric Sequelae to the Loss of an Adolescent Peer to Suicide. *Journal of the American Academy of Child & Adolescent Psychiatry*, *32*(3), 509–517.

Cooper Jr, M.T., Bard, D., Wallace, R., Gillaspy, S., & Deleon, S. (2018). Suicide attempt admissions from a single children's hospital before and after the introduction of Netflix series 13 Reasons Why. *Journal of Adolescent Health,* 63, 688-693.

Curtin, S.C., Warner, M., & Hedegaard, H. (2016). Increase in Suicide in the United States, 1999-2014. In U.S. Department of Health and Human Services, & N.C.f.H.S. CDC (Eds.). Hyattsville, MD.

da Rosa, G.S., Andrades, G.S., Caye, A., Hidalgo, M.P., de Oliveira, M.A.B., & Pilz, L.K.

    (2019). Thirteen Reasons Why: The impact of suicide portrayal on

    adolescents' mental health. *Journal of psychiatric research,* 108, 2-6.

Ferguson, C.J. (2018). 13 Reasons Why Not: A Methodological and Meta-Analytic

    Review of Evidence Regarding Suicide Contagion by Fictional Media. *Suicide*

    and Life-Threatening Behavior.

Hong, V., Ewell Foster, C.J., Magness, C.S., McGuire, T.C., Smith, P.K., & King, C.A.

    (2019). 13 Reasons Why: viewing patterns and perceived impact among

    youths at risk of suicide. *Psychiatric services,* 70, 107-114.

Kitanaka, J. (2008). Diagnosing suicides of resolve: psychiatric practice in

    contemporary Japan. *Culture, Medicine, and Psychiatry,* 32, 152-176.

Lauricella, A.R., Cingel, D.P., & Wartella, E. (2018). Exploring how teens and parents

    responded to 13 Reasons Why: Global Report. Evanston, IL: Center on Media

    and Human Development, Northwestern University.

Maple, M., Cerel, J., Sanford, R., Pearce, T., & Jordan, J. (2017). Is Exposure to Suicide

    Beyond Kin Associated with Risk for Suicidal Behavior? A Systematic Review

    of the Evidence. *Suicide and Life-Threatening Behavior,* 47, 461-474.

Mueller, A.S. (2017). Does the media matter to suicide?: Examining the social

    dynamics surrounding media reporting on suicide in a suicide-prone

    community. *Social science & medicine,* 180, 152-159.

Mueller, A. S., & Abrutyn, S. (2015). Suicidal disclosures among friends: using social

    network data to understand suicide contagion. *Journal of health and social*

    behavior, *56*(1), 131-148.

Niederkrotenthaler, T., Fu, K.-w., Yip, P.S.F., Fong, D.Y.T., Stack, S., Cheng, Q., et al.

    (2012). Changes in suicide rates following media reports on celebrity suicide:

    a meta-analysis. *Journal of Epidemiology and Community Health,* 66, 1037-

    1042.

Niederkrotenthaler, T., Till, B., Kapusta, N.D., Voracek, M., Dervic, K., & Sonneck, G.

    (2009). Copycat effects after media reports on suicide: a population-based

    ecologic study. *Social science & medicine,* 69, 1085-1090.

Niederkrotenthaler, T., Voracek, M., Herberth, A., Till, B., Strauss, M., Etzersdorfer, E.,

    et al. (2010). Role of media reports in completed and prevented suicide:

    Werther v. Papageno effects. *The British Journal of Psychiatry,* 197, 234-243.

Phillips, D.P. (1974). The influence of suggestion on suicide: Substantive and

    theoretical implications of the Werther effect. *American sociological review*,

    340-354.

Pirkis, J., & Blood, R.W. (2001). Suicide and the media: Part II. Portrayal in fictional

    media. *Crisis: The Journal of Crisis Intervention and Suicide Prevention,* 22,

    155.

Randall, J.R., Nickel, N.C., & Colman, I. (2015). Contagion from peer suicidal behavior

    in a representative sample of American adolescents. *Journal of Affective*

    Disorders, 186, 219-225.

Scalvini, M., & Rigamonti, F. (2017). Why we must defend suicide in fiction. *Bmj,* 359,

    j4743.

Stack, S. (2005). Suicide in the media: A quantitative review of studies based on

    nonfictional stories. *Suicide and Life-Threatening Behavior,* 35, 121-133.

Thompson, L.K., Michael, K.D., Runkle, J.R., & Sugg, M.M. (2019). Crisis Text Line use

    following the release of Netflix series 13 Reasons Why Season 1: Time series

    analysis of help-seeking behavior in youth. *Preventive Medicine Reports*,

    100825.

Till, B., Vesely, C., Mairhofer, D., Braun, M., & Niederkrotenthaler, T. (2019). Reports

    of Adolescent Psychiatric Outpatients on the Impact of the TV Series "13

    Reasons Why": A Qualitative Study. *Journal of Adolescent Health,* 64, 414-415.

Twenge, J.M., Cooper, A.B., Joiner, T.E., Duffy, M.E., & Binau, S.G. (2019). Age, period,

    and cohort trends in mood disorder indicators and suicide-related outcomes

    in a nationally representative dataset, 2005-2017. *Journal of abnormal*

    psychology.

Zayas, L., Gulbas, L.E., Fedoravicius, N., & Cabassa, L.J. 2010. "Patterns of distress,

    precipitating events, and reflections on suicide attempts by young Latinas."

    Social science & medicine, 70, 1773-1779.