






# The impact of screen media portrayals of suicide on viewers: A rapid review of the evidence

Miriam Posselt MPsychClin, PhD   | Heather McIntyre BA(Hons), GradDipAppSci   | Nicholas Procter MBA, PhD  

Mental Health and Suicide Prevention Research Group, UniSA Clinical and Health Sciences, University of South Australia, Adelaide, South Australia, Australia

## Correspondence

Miriam Posselt, Mental Health and Suicide Prevention Research Group, UniSA Clinical and Health Sciences, University of South Australia, GPO Box 2471, Adelaide, South Australia, Australia.  
Email: Miriam.posselt@unisa.edu.au

## Abstract

This rapid review aimed to review recent published literature and describe the current evidence regarding the impact, on viewers, of portrayals of suicide in screen/moving-image fiction and non-fiction media, such as television/web series, films and documentaries. We searched various databases for research conducted within the past decade (2009–2019). A total of 16 articles were eligible for inclusion. The literature reported varying impacts of portrayals of suicide through moving-image media such as increased suicidal ideation and behaviour, as well as positive impacts such as increased help-seeking behaviour. While there is limited evidence which focuses specifically on the impact of moving-image media, the studies included in this review highlight concerning trends regarding the impact of media portraying deaths by suicide on subsequent suicidality. However, positive impacts on suicide awareness, literacy and help-seeking behaviour were also identified.

## KEYWORDS

documentaries, film, media, self-harm, suicidal ideation, suicide, television

## 1 | INTRODUCTION

Suicide is a significant public health concern and it is estimated that approximately 800,000 people die by suicide globally each year (World Health Organization, 2018). The role that media plays in contributing to suicide rates has been the focus of much debate and research. The idea that portrayal or reporting of suicide in the media can lead to imitation or contagion effects has been referred to historically as the Werther Effect. This term was named after a book published in 1774 called *The Sorrows of Young Werther*, in which the protagonist dies by suicide. It is believed that through the release of the book, large numbers of imitation suicides across Europe occurred. The Werther Effect has been tested by a large body of research. Much of this research has focused on the reporting of celebrity suicides in the media- in television, print media, radio and internet-based news, and meta-analyses have concluded that media reporting of celebrity or high-profile suicides are associated with increased suicide rates and suicide method chosen (Niederkrötenhaler

et al., 2012). Many reviews have concluded that media reporting of suicide and the portrayal of suicide in both fictional and non-fictional media, can increase suicidal behaviour, and there is sufficient evidence to suggest that this link is causal (Pirkis & Blood, 2001a, 2001b; Stack, 2005).

Within the last two decades, research has progressed from looking broadly at association between suicide portrayed in the media and impact on suicide rates, to increasingly examining the more nuanced effects of portrayals of suicide in the media and how factors or conditions can alter or mediate impact. In contrast to the Werther Effect, The Papageno Effect has also increasingly been researched and refers to possible protective or positive effects that media reporting of suicide can have, such as bringing about necessary awareness and stigma reduction, and education about help and support options.

Media reporting recommendations have been established by various organisations including the World Health Organization (World Health Organisation, 2017). These recommendations

outline the importance of not using sensationalist language, avoiding mention or imagery of the location, avoiding reference to the method and or means and providing the media consumer with support options (Mindframe, 2019; World Health Organisation, 2017).

While there are several reviews that examine portrayal of suicide in media broadly, such as the impact of various and mixed forms of media, none appear to focus on the specific impact of portraying suicidal behaviour in fiction and non-fiction moving-image media, such as television, videos, films and documentaries. We believed it was important to differentiate between the effect of print media/media about celebrity suicides from screen/moving-image media. This is because there has been a large focus on media reporting of suicides, mostly celebrity suicides and this has dominated conversations and understandings about the contagion effects of media on suicide. There has been much less focus on the impact of screen media, such as television, movies, documentaries and music videos. The present review has been conducted at a time where there has been considerable public, media and research attention paid to possible Werther and Papageno Effects of a popular web series, *13 Reasons Why*. The series depicts a fictional character ending her life in the final episode of the first season, after documenting the 13 reasons that led to her decision to suicide. The first season was released in 2017 and was followed by much discussion concerned with the potential glamorising of suicide and depicting it as a solution to the problems and events documented. Despite criticism, the second season was released in 2018 and there have been two more seasons released since then. Coinciding with this, in 2018 a documentary film was released called *The Ripple Effect* in which the non-fiction personal story of Kevin Hines, who attempted suicide at age 19 years is shared. The film is intended to be educational and inspirational, sharing a message of hope and gratitude to have survived his attempt. However, coupled with images of the location of his attempt and at times graphic descriptions of suicide methods, it is possible that the film has the potential for triggering of negative effects in addition to possible Papageno effects. Although, to our knowledge these possibilities have not been explored by any research.

It is important to examine the evidence specifically in relation to moving-image media because there is evidence that a portrayal of suicide in the media is more likely to be associated with increased suicidality if it is broadcasted on television versus other media platforms, such as radio and print media (Pirkis, Burgess, Francis, Blood, & Jolley, 2006). Furthermore, research has found that films are increasingly portraying suicidal behaviour and that ratings for films with explicit suicidal content are increasingly being classified at lower classification levels such as PG rather than R (Jamieson & Romer, 2011). This research highlights the importance of understanding the unique impact of screen media and isolating and synthesising research specifically conducted on this topic.

Our research aimed to undertake an independent rapid review of the evidence regarding possible impacts of portraying suicide in

### What is known about this topic?

- Past reviews have focused on the impact of mixed-medium media portrayals of suicide.
- Some evidence suggests that media reporting of suicides is more likely to lead to increased suicidality if broadcasted on television versus other platforms. Therefore, there is justification to review the evidence on specifically screen/ moving-image media portrayals.

### What this paper adds?

- This review highlights imitation and contagion effects arising from moving-image media portraying suicide.
- Viewer characteristics such as higher levels (or histories) of depression, suicidality, dissociation, thought suppression and identification with the protagonist appear related to increased risk of suicidality.
- For some viewers, narratives of hope, help-seeking and portrayals of overcoming/ coping with a suicidal crisis can lead to positive outcomes.

moving-image media involving both fictional and non-fictional characters, on the consumers of that media.

## 2 | METHODS

### 2.1 | Rapid review

We performed a time-limited rapid review to efficiently capture the current and recent evidence regarding the impact of portraying suicidal behaviour in moving-image media involving both fictional and non-fictional characters, on the consumers or viewers of that media. Rapid reviews have been found to yield similarly rigorous results when compared to systematic reviews (Watt et al., 2008). In this rapid review, we followed guidelines published by the World Health Organization (WHO) on conducting rapid reviews to strengthen health policy and system (Tricco, Langlois, & Straus, 2017), as well as the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Moher, Liberati, Tetzlaff, & Altman, 2009). See Figure 1 for PRISMA flow diagram.

### 2.2 | Search strategy

The research team developed the search strategy. The search was conducted in March 2019 in the following databases: Academic Search Premier, Communication Mass Media, Embase, Health and Society, Humanities and Social Sciences, Medline, ProQuest Social Sciences, Psychology and Behavioural Sciences and PsycInfo. Various terms were used including suicide, self-harm, mass media,

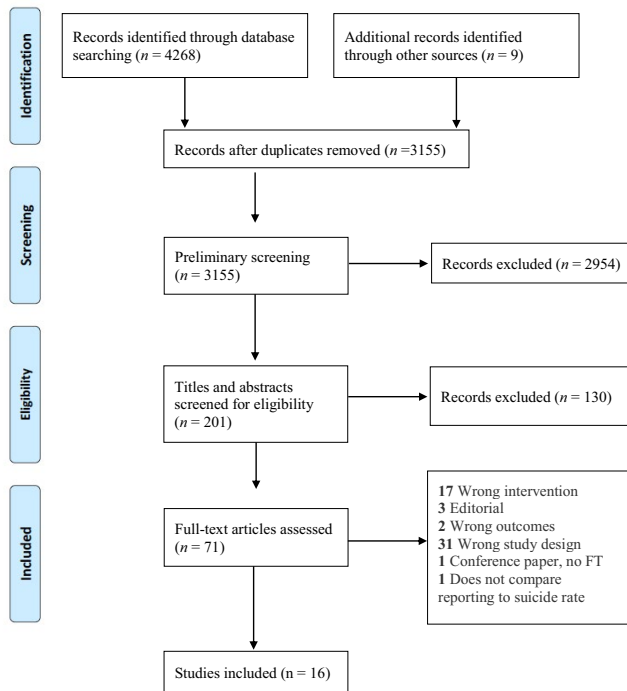


FIGURE 1 PRISMA flow diagram (Moher et al., 2009)

media. Search terms were limited to titles, abstracts and keywords, where this was a feature of the database. Limits were applied including: English language and time range of 2009–2019. See Appendix A for search strategy. Reference lists of included articles were also hand searched to obtain important additional results.

The research team engaged in a three-stage screening and study selection process as follows: (a) preliminary screening conducted by two reviewers (HE, MP) for any clearly inappropriate results (e.g. non peer-reviewed journal articles or not on topic); (b) all remaining articles were uploaded to review management software (Covidence) and a title and abstract screen was conducted by two reviewers (HE, MP); (c) full-text screening was then conducted with all remaining results by two reviewers (HE, MP). The research team (HE, MP, NP) discussed the results and any conflicts were resolved through discussions to achieve 100% agreement. Key information was extracted from all studies into a structured data table. Two authors (HE, MP) conducted and cross-checked data extraction.

Studies were eligible for inclusion if the article was peer-reviewed, primary research (any study design including mixed methods, quantitative or qualitative), included an exposure/portrayal of suicide in moving-image media, included a measure of suicidal ideation, behaviour or literacy (knowledge, awareness, attitudes and help seeking) and published between 2009 and 2019. Studies must include moving-image media (e.g. films, videos, television series/web series and documentaries), either fiction or non-fiction. An age range was not applied to participants. Studies were excluded if the research focused on moving-image media combined with other forms such as television reporting of suicides combined with print media, and if it did not separate the impact of television from mixed media.

We excluded studies focused on internet media, such as social media or websites, given that this typically concerned individuals seeking pro-suicide information from websites or posting their own images or stories to the internet such as forums, blogs, social media and online communities.

Two authors independently conducted a risk of bias assessment using quality appraisal tools that corresponded to the study design of the included articles. Five appraisal tools were used to assess risk of bias: Joanna Briggs Institute (JBI) Critical Appraisal Checklist for Case Control Studies; JBI Critical Appraisal Checklist for Analytical Cross-Sectional Studies; JBI Critical Appraisal Checklist for Cohort Studies; JBI Critical Appraisal Checklist for Quasi-Experimental Studies; JBI Critical Appraisal Checklist for Randomized Controlled Trials (Moola et al., 2017). The JBI tools required a response of the following four options: yes, no, unclear, not applicable. Any discrepancies between the two reviewers in checklist ratings were resolved by discussion to gain 100% consensus. The research team agreed on the following percentages for quality: 90%–100% exceptionally high quality, 80%–90% high quality, 70%–80% moderate to high quality.

A narrative synthesis method was used due to the heterogeneity of study contexts, study designs, samples, measures and outcome variables. Therefore, all relevant data from the studies that met inclusion criteria and critical appraisal criteria have been descriptively summarised. The summarised findings relate to the reported key impacts of portraying suicide in moving-image media, on the consumers of that media.

### 3 | RESULTS

From initial database searching, a total of 4,277 publications were identified. After removing duplicates ( $n = 1,122$ ) and articles that were clearly not relevant to the research question ( $n = 2,954$ ), 201 articles were included for title and abstract screening. A total of 130 articles were excluded at this stage and full text screening was conducted on 71 articles. Of these, 16 articles met inclusion criteria and were deemed eligible for inclusion.

#### 3.1 | Characteristics of included studies

Thirteen studies examined the impact of fictional portrayals of deaths by suicide, whereas four studies examined the impact of portraying deaths by suicide of non-fictional characters. The studies were conducted across five different countries. Sample sizes ranged from 60 to 21,062. However, one study (which analysed Google searches) did not state participant numbers but referred to search numbers (Ayers, Althouse, Leas, Dredze, & Allem, 2017). See Table 1 for study locations and sample sizes.

Six studies analysed the effect of suicidal content in a fiction film (Pouliot, Mishara, & Labelle, 2011; Stack, Kral, & Borowski, 2014; Till, Herberth, Sonneck, Vitouch, & Niederkrotenthaler, 2013; Till, Niederkrotenthaler, Herberth, Vitouch, & Sonneck, 2010; Till, Strauss,

TABLE 1 Key features of included studies

No.	Study/reference	Country	Media type: e.g. documentary, film; fiction/ non-fiction	Study aims	Sample size and characteristics	Relevant outcome measures	Key findings related to impact on suicide related variables	Critical appraisal score
1	Arendt, F., Scherr, S., Pasek, J., Jamieson, P. E., & Romer, D. (2019). Investigating harmful and helpful effects of watching season 2 of 13 Reasons Why: Results of a two-wave U.S. panel survey. <i>Social Science &amp; Medicine</i> , 232, 489–498.	USA	TV series—'13 Reasons Why'—Series 2	Review the effects of '13 Reasons Why'—Series 2	n = 729 F = 81.6% M = 18.4% (age 18–29 years) 1/3 participants were Hispanic	Suicide Probability Scale (SPS); Brief version of Beck's Hopelessness Scale; Non-suicidal self-injury; Youth Risk Behavior Survey; Survival and coping beliefs subscale of Brief Reasons for Living scale; three items from General Social Survey; Intention to provide help to suicidal individuals (Help scale); Exposure to '13 Reasons Why'; Exposure to other suicide stories; Exposure to warning message; Help Message; Did the show spur discussion with friends	Fictional stories with content about suicide can have harmful or helpful effects	8/9 (89%)
2	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'. <i>JAMA Internal Medicine</i> , 177, 1527–1529.	Not stated; internet based	TV series—'13 Reasons Why' Series 1	Compare Internet searches for suicide after the premiere of '13 Reasons Why', series 1, with anticipated search numbers	Not stated; internet based	Search trends including the term suicide were analysed including the top 25 terms and the next five most related terms. Suicide queries were divided by the total number of searches for each day	Suicide searches were 19% (95% CI, 14%–24%) higher for 19 days following the release of '13 Reasons Why' (900,000–1.5 million more searches than expected.) For 12 of the 19 days studied, suicide queries were significantly greater than expected. '13 Reasons Why' has both increased suicide awareness while increasing suicidal ideation	6/8 (75%)

(Continues)

TABLE 1 (Continued)

No.	Study/reference	Country	Media type: e.g. documentary, film; fiction/ non-fiction	Study aims	Sample size and characteristics	Relevant outcome measures	Key findings related to impact on suicide related variables	Critical appraisal score
3	Cooper, M. T., Bard, D., Wallace, R., Gillaspay, S., & Deleon, S. (2018). Suicide attempt admissions from a single children's hospital before and after the introduction of Netflix series '13 Reasons Why'. <i>Journal of Adolescent Health, 63</i> , 688–693.	USA	TV series—'13 Reasons Why'—Series 1	Identify trends in self-harm admissions to a children's hospital after the release '13 Reasons Why' Series 1	n = 775 F = 73% M = 17% (age 4–18 years; mean age 15.2 [SD 2.1])	Patient records analysis for those presenting to the ED with SHID/SI	-Significant increase in SHID/SI admissions after the screening of '13 Reasons Why' Season 1. Predicted (versus actual) number of admissions for SHID/SI in May 2017 was 12 (versus 31)	6/8 (75%)
4	Hong, V., Ewell Foster, C. J., Magness, C. S., McGuire, T. C., Smith, P. K., & King, C. A., (2018). '13 Reasons Why': Viewing patterns and perceived impact among youths at risk of suicide. <i>Psychiatric Services, 70</i> , 107–114.	USA	TV series – '13 Reasons Why' – Series 1	Examine exposure to and patterns of engagement with the '13 Reasons Why' – Series 1 and the impact on youths presenting with suicide-related concerns to a psychiatric ED during the year after the series' premiere	n = 87 Parent-youth dyads Youth – F = 71% M = 26% Nonbinary = 2% (age 10–17 years; mean age = 14.6 [SD + 1.8])	Youth Questionnaire; Reynolds Adolescent Depression Scale, (RADS-2); Suicidal Ideation Questionnaire--Junior (SIQ-JR) (29); 44-item questionnaire to assess several aspects of youths' interactions with '13 Reasons Why'; Positive and Negative Affect Schedule (PANAS); Identification with female/male lead actors; Perceptions of whether the series had an impact on the youth's own suicide risk and on the likelihood of engaging in support-seeking behaviours; open-ended qualitative questions Parent Questionnaire: 36-item; Identical PANAS responses to the series	n = 21 (51%) believed watching the series increased own risk of suicide. Identifying with character resulted in higher SI (n = 47, df = 43, p = .001) and depressive symptoms (n = 43, df = 43, p = .004). Participants do (versus do not) believe the series glorifies or normalises suicide and mental illness n = 13 (versus n = 12). Participants reported the series made them less likely (versus more likely) to talk to others n = 12%-28% (versus n = 12%-28%). 51% believed the series increased their suicide risk to a non-zero degree; Participants with more depressive symptoms and SI were more likely to identify with the lead characters and report negative affect while viewing.	10/10 (100%)

(Continues)

TABLE 1 (Continued)

No.	Study/reference	Country	Media type: e.g. documentary, film; fiction/ non-fiction	Study aims	Sample size and characteristics	Relevant outcome measures	Key findings related to impact on suicide related variables	Critical appraisal score
5	King, K. E., Schlichthorst, M., Spittal, M. J., Phelps, A., & Pirkis, J. (2018). Can a documentary increase help-seeking intentions in men? A randomised controlled trial. <i>Journal of Epidemiology and Community Health</i> , 72, 86–92.	Australia	Documentary- non-fiction— 'Man Up'	Does 'Man Up' increase men's help seeking for personal and emotional problems?	n = 337 Intervention = 169 Control = 168 (age 18 + years) Participants all male	General Help Seeking Questionnaire (GHSQ)	This study demonstrates that media-based public health interventions that focus on traditional masculinity affecting men's health outcomes positively. For the intervention group, help seeking scores were significantly greater than the control group.	13/13 (100%)
6	Pouliot, L., Mishara, B. L., & Labelle, R. (2011). The Werther Effect reconsidered in light of psychological vulnerabilities: Results of a pilot study. <i>Journal of Affective Disorders</i> , 134, 488–496.	Canada	Fiction—films (various)	The possible impact to young people of exposure to a film with suicidal content	F = 71 M = 29 Undergraduates (mean age 23 years [SD = 4.27]);	32 items exposure to *suicide stories; *duration of distress; *negative affective; *cognitive reactions. IES-R; Suicide Probability Scale, (SPS); Trait Dissociation Questionnaire (TDQ); The Mehrabian' Trait Arousalability Scale (TAS); White Bear Thought Suppression Inventory (WBST).	70% reported being distressed by the portrayal of a suicide in a fictional film. 33% felt distressed for several days to several weeks. Majority (71%) stated being mentally preoccupied and experienced intrusive memories (68%). 55% of males were distressed compared to 76% of females. From this sub-group, 33% stated their distress lasted from a few days to less than a month. 13% feared they would engage in the same suicidal behaviour as the protagonist, and reported that the idea crossed their mind to act on it.	8/8 (100%)
7	Retamero, C., Walsh, L., & Otero-Perez, G. (2014). Use of the film 'The Bridge' to augment the suicide curriculum in undergraduate medical education. <i>Academic Psychiatry</i> , 38, 605–610.	Not stated, possibly USA	Documentary- non-fiction—'The Bridge'	Is the movie 'The Bridge' complementary to the suicide curriculum for medical students?	n = 180 Second-year medical students	Survey regarding beliefs about suicide and about learning about suicidal concepts in the film	Students reported 'The Bridge' is valuable and believed it should be shown to people in the medical field; 80% of students commented about at least one person in the story or about the story in general	7/9 (77%)

(Continues)

TABLE 1 (Continued)

No.	Study/reference	Country	Media type: e.g. documentary, film; fiction/ non-fiction	Study aims	Sample size and characteristics	Relevant outcome measures	Key findings related to impact on suicide related variables	Critical appraisal score
8	Rosa, G. S. D., Andrades, G. S., Caye, A., Hidalgo, M. P., Oliveira, M. A. B. D., & Pilz, L. K. (2019). 'Thirteen Reasons Why': The impact of suicide portrayal on adolescents' mental health. <i>Journal of Psychiatric Research</i> , 108, 2–6.	Brazil	TV series—'13 Reasons Why', Series 1	To investigate the influence of media portrayals of suicide on adolescents' mood, focusing on '13 Reasons Why'	n = 7,004 F = 5,870 (84%) M = 1,134 (16%) Suicidal ideation n = 49%; Suicide attempt n = 12% (ages 12–18 years)	Mood (sadness and lack of motivation) prior to watching the series, and prevalence of self-harm, suicidal ideation, or suicide attempts	23.7% reported worsening of mood after watching '13 Reasons Why'. Those prior to watching the movie who had more frequent and intense feeling of sadness and lack of motivation experienced worsening mood or reported suicidal ideation/self-harm/ suicide attempt	6/8 (75%)
9	Scherr, S., & Reinemann, C. (2011). 'Belief in a Werther Effect: third-person effects in the perceptions of suicide risk for others and the moderating role of depression' <i>Suicide &amp; Life-threatening Behavior</i> , 41, 624–634.	USA	Music video with suicidal content: 'Jeremy' by Pearl Jam	To examine students' rates of self-risk of depression and suicide and perceptions of others' suicide risk.	n = 133 F = 74 M = 59 Undergraduates (Mean age was 19.13 years [SD = 2.35]). Control = 66 Experimental = 67	Participants self-reported estimates of the risk of depression and suicide for themselves and for others	Participants reported risk of suicide as higher for others than for themselves after being exposed	10/12 (83%)
10	Schlichthorst, M., King, K., Spittal, M., Reifels, L., Phelps, A., & Pirkis, J. (2018). Using a television documentary to prevent suicide in men and boys. <i>Australian Psychiatry</i> , 26, 160–165.	Australia	Documentary- non-fiction—'Man Up'	Was the series 'Man Up' effective in raising awareness for males' conform to masculine norms and affect their likelihood of help seeking and connecting with their male friends?	n = 1,287 All male Group A = 476 (completed the pre-screening survey); Group B = 192 (completed the post-screening survey and had not viewed 'Man Up'); Group C = 619 (completed the post-screening survey and had viewed 'Man Up')	Help-seeking behaviour	Viewing <i>Man Up</i> did not increase likelihood of help seeking	8/8 (100%)
11	Stack, S., Kral, M., & Borowski, T. (2014). Exposure to suicide movies and suicide attempts: A research note. <i>Sociological Focus</i> , 47, 61–70.	USA	Fiction—films (various)	A retrospective study assessing the impact of cumulative, voluntary exposure to suicide movies.	n = 260 College students. No other details given regarding age or gender	Religiosity—a single-item measure used in the World Values Surveys; Depression—Youth Risk Behavior Surveys; Burdensomeness—Joiners' nine-item index;	Risk of attempted suicide increased by 47.6% with each additional movie exposure	7/8 88%

(Continues)

TABLE 1 (Continued)

No.	Study/reference	Country	Media type: e.g. documentary, film; fiction/ non-fiction	Study aims	Sample size and characteristics	Relevant outcome measures	Key findings related to impact on suicide related variables	Critical appraisal score
12	Till, B., Strauss, M., Sonneck, G., & Niederkrotenthaler, T. (2015). Determining the effects of films with suicidal content: A laboratory experiment. <i>British Journal of Psychiatry</i> , 207, 72–78.	Austria	Fiction—films 'Night, Mother', 'A Single Man' or 'Elizabeth-town'.	To examine the impact of three drama films with suicidal content that with varying outcomes and testing the baseline suicidality of the participants.	n = 95 F = 65 M = 30 (mean age was 27.32 years [SD 10.43]) High school graduate (average level of education)	Affective State Scale (mood); Erlanger Depression Scale; Satisfaction with Life Scale; Self-worth subscale of World Assumptions Scale; Reasons for Living Scale; Benevolence of the world subscale of the World Assumptions Scale; Cohen's Identification Scale (suicidality)	When exposed to a film displaying suicide, participants with lower vulnerability experienced more emotional reactions. Participants with higher SI—particularly if they identified with protagonist. Portrayals of mastery of a crisis may have beneficial effects for those who are more vulnerable	10/12 (83%)
13	Till, B., Herberth, A., Sonneck, G., Vitouch, P., & Niederkrotenthaler, T. (2013). 'Who identifies with suicidal film characters? Determinants of identification with suicidal protagonists of drama films'. <i>Psychiatria Danubina</i> , 25, 158–162.	Austria	Fiction—films 'It's My Party' or 'The Fire Within'	How influential is similar identification (i.e. sex, age, and education) by a participant with a suicidal protagonist of a film as well as by the participants' empathy and suicidality?	n = 60 M = 23 (38.3%), (mean age of 37.65 years [SD = 18.78]); F = 37 (61.7%), (mean age of 43.32 years [SD = 23.06]).	Empathy (Interpersonal Reactive Index); Identification; Suicidality; Socio-demographics	Participants' identification was not associated with socio-demographic similarity or the viewer's suicidality	10/12 (83%)
14	Till, B., Vitouch, P., Herberth, A., Sonneck, G., & Niederkrotenthaler, T. (2013b). 'Personal suicidality in reception and identification with suicidal film characters'. <i>Death Studies</i> , 37, 383–392.	Austria	Fiction—films 'It's My Party' or 'The Fire Within'.	Analyse personal suicidality on identity work and identification during films with suicidal content with participants with low suicidality scores.	n = 150 F = 95 M = 55 (Mean age 36.05 years) Caucasian 30 participants per group	Suicidality Identification; Identification with a specific character; Suicidality Socio-demographics; Identification; Identity	No relationship between suicidality and identification. Personal suicidality did not correlate significantly with those watching censored versions of the film but did with those watching the original (suicide) versions of the films. Higher SI in the groups watching the original films. Participants used the film for their own problem solving	9/12 (75%)

(Continues)



TABLE 1 (Continued)

No.	Study/reference	Country	Media type: e.g. documentary, film; fiction/ non-fiction	Study aims	Sample size and characteristics	Relevant outcome measures	Key findings related to impact on suicide related variables	Critical appraisal score
15	Till, B., Niederkrotenthaler, T., Herberth, A., Vitouch, P., & Sonneck, G. (2010). Suicide in films: The impact of suicide portrayals on nonsuicidal viewers' well-being and the effectiveness of censorship. <i>Suicide &amp; Life-threatening Behavior</i> , 40, 319–327.	Austria	Fiction - films 'It's My Party' or 'The Fire Within' or 'Phenomenon'	What is the effect of suicide films and censored films on viewers' emotional and mental state?	n = 150 F = 95 M = 55 (Mean age 36.05 years) Caucasian 30 participants per group	Becker mood scale; Adjective check list (activation and inner tension); Self-esteem scale; Satisfaction with life scale; Depression scale; Suicidality; Attitudes to suicide; Empathy (Interpersonal Reactive Index); Quality of relationship with parents.	Deterioration of mood and an increase in inner tension and depression scores after viewing the films, followed by a rise in self-esteem and life satisfaction and a drop in suicidality. No significant differences between film groups. Negative effects were greater the more a subject identified with the protagonist	10/12 (83%)
16	Zimmerman, A., Caye, A., Zimmerman, A., Salum, G. A., Passos, I. C., & Kieling, C. (2018). Revisiting the Werther Effect in the 21st Century: Bullying and suicidality among adolescents who watched '13 Reasons Why'. <i>Journal of Child &amp; Adolescent Psychiatry</i> , 57, 610–612.	Brazil	Fiction – web series—'13 Reasons Why', first series	Does watching '13 Reasons Why' increase SI?	n = 21,062 Control group: n = 2,323 Recruitment through Facebook for United States or Brazil Age = 12–19 years Mostly female and 15–17 years	Survey re-bullying and SI; Patient Health Questionnaire-2 (PHQ-2)—depression, suicidal ideation.	Those with histories of past SI experienced 16.5% more SI; 59.2% less SI; 24.2% no change. Those without a history of SI had a 6.4% increase in suicidal thoughts. Decreases in SI were more pronounced in those with no depressive symptoms. Participants with depression and/or prior suicidal ideation, could be more negatively affected by watching the show. There was a negative affect for high risk individuals. Pre-existing psychopathology is a causal characteristic for SI after watching the show. 4.7% of those without SI felt more SI after watching the show.	6/8 (75%)

Abbreviations: ED: emergency department; SHID: Self-harm with intent to die; SI: Suicidal ideation.

Sonneck, & Niederkrotenthaler, 2015; Till, Vitouch, Vitouch, Herberth, Sonneck, & Niederkrotenthaler, 2013), six studies analysed the effect of watching the web series *13 Reasons Why* (Arendt, Scherr, Pasek, Jamieson, & Romer, 2019; Ayers et al., 2017; Cooper, Bard, Wallace, Gillaspay, & Deleon, 2018; Hong et al., 2018; Rosa et al., 2019; Zimmerman et al., 2018), three studies analysed documentaries (King et al., 2018; Retamero, Walsh, & Otero-Perez, 2014; Schlichthorst et al., 2018) and one study looked at the suicidal content of a music video (Scherr & Reinemann, 2011).

### 3.2 | Participant characteristics

Out of the 16 studies, 11 focussed on adults (Arendt et al., 2019; King et al., 2018; Pouliot et al., 2011; Retamero et al., 2014; Scherr & Reinemann, 2011; Schlichthorst et al., 2018; Stack et al., 2014; Till et al., 2010, 2015; Till, Vitouch, et al., 2013; Till, Vitouch, et al., 2013), two on adolescents and young adults (Rosa et al., 2019; Zimmerman et al., 2018), one on children and young adults (Cooper et al., 2018), one on children, young adults and parents (Hong et al., 2018) and one study focussed on internet searches (Ayers et al., 2017).

Participant gender was reported in 13 studies. Combining studies that reported participant gender reveals a sample of 31,630 participants and shows that the gender distribution was overwhelmingly female (83% females, 17% males). Two studies included male participants only (King et al., 2018; Schlichthorst et al., 2018) and two large scale surveys reported that the majority of their participants were female (89.4% female in Zimmerman et al., 2018 and 84% female in Rosa et al., 2019).

### 3.3 | Study methods

Six studies were randomised control trials (RCTs; King et al., 2018; King et al., 2018; Scherr & Reinemann, 2011; Till et al., 2010, 2015; Till, Vitouch, et al., 2013; Till, Vitouch, et al., 2013), five studies were quasi-experimental (Arendt et al., 2019; Ayers et al., 2017; Cooper et al., 2018; Retamero et al., 2014; Schlichthorst et al., 2018), four studies were cross-sectional (Pouliot et al., 2011; Rosa et al., 2019; Stack et al., 2014; Zimmerman et al., 2018) and one study was a case series (Hong et al., 2018).

### 3.4 | Critical appraisal

Critical appraisal revealed four studies with 'exceptionally high quality' (100%) scores as determined by the tool checklists (Hong et al., 2018; King et al., 2018; Pouliot et al., 2011; Schlichthorst et al., 2018). Six studies scored 'high quality' (80%–90%) (Arendt et al., 2019; Scherr & Reinemann, 2011; Stack et al., 2014; Till et al., 2010, 2015; Till, Vitouch, et al., 2013). Six studies scored 'moderate to high quality' (70%–80%) (Ayers et al., 2017; Cooper et al., 2018; Retamero et al., 2014; Rosa et al., 2019; Till, Vitouch, et al., 2013; Zimmerman et al., 2018).

## 3.5 | Key findings

The key potential impacts of moving-image media portrayals of suicide on the viewer included suicidal ideation and behaviour; suicide literacy (knowledge/awareness, help-seeking, attitudes); and emotional distress and psychological impacts. Table 1 outlines key information of the included studies.

### 3.6 | Suicidal ideation and behaviour

Overall, nine studies (53%) found evidence for potential increases in suicidal ideation and behaviour following exposure. Four studies (24%) found no change in suicidal ideation and behaviour following exposure. Three studies (18%) found evidence for potential decreases in suicidal ideation and behaviour following exposure.

Cross-sectional data suggested that exposure to films portraying suicide can lead to increased consideration of imitating the suicidal behaviour, or actual suicide attempts (Pouliot et al., 2011; Stack et al., 2014; Zimmerman et al., 2018). This included individuals reporting that they had considered imitating the suicidal act of a protagonist in a film (Pouliot et al., 2011), evidence that cumulative exposure to films portraying suicide could increase likelihood of a suicide attempt being reported by nearly 50% with each additional movie exposure (Stack et al., 2014) and increased suicidal ideation reported after watching *13 Reasons Why* (Zimmerman et al., 2018).

Characteristics found to influence these relationships included histories of suicidal ideation (Pouliot et al., 2011; Zimmerman et al., 2018), and greater dissociation and thought suppression levels (Pouliot et al., 2011).

A case series analysis also found evidence of increased suicidal risk among young people following *13 Reasons Why* (Hong et al., 2018). Among this sample ( $n = 87$ ) 13 participants believed the series glorified or normalised suicide, however, 12 participants did not.

Several quasi-experimental studies (Arendt et al., 2019; Ayers et al., 2017; Cooper et al., 2018) also reported evidence of increased suicidal ideation and behaviour associated with the Netflix web series *13 Reasons Why*. For example, hospital admissions for suicidal ideation and self-harm with intent to die were found to be significantly higher than predicted (based on a 5-year prediction model) following the release of the series (Cooper et al., 2018). Increased numbers of people searching the internet for ways to die by suicide such as using search terms 'how to commit suicide' and 'how to kill yourself' were also observed following the release of the series (Ayers et al., 2017).

Finally, in a study where participants completed surveys pre- and post-viewing the second season of the series, increased suicidal ideation and risk of suicide was observed among those who reported being exposed to only some or part of the second season when compared to those who watched the entire series (Arendt et al., 2019). In this study, participant characteristics that were reported to influence the relationship included those with lower levels of education

and those who were current students. These groups were more likely to exhibit increased suicide risk (Arendt et al., 2019).

Identification with the protagonist was found to be a relevant factor by several researchers. Hong et al. (2018) found that participants who more strongly identified with the protagonist in *13 Reasons Why*, reported higher levels of suicidal ideation and more strongly believed that the series contributed to their increased risk. Regarding film media, there is some inconsistency in findings regarding whether identification with the protagonist is an influencing factor in the relationship between media portrayal of suicide and outcome. Across the three RCTs conducted by Till and colleagues where participants were randomised to different film conditions, two of the studies found no relationship between identification with the protagonist and viewer suicidality, however, the most recent of these studies (Till et al., 2015) found that identification was significantly associated with baseline suicidality and those with a stronger identification with the protagonist experienced the greatest increase in suicidality after exposure to the film which contained the protagonist's suicide.

### 3.6.1 | No observed changes in suicidal behaviour

Not all studies found evidence of increased suicidality among viewers and several studies have found either no increase in suicidal ideation or behaviour as a result of the media portrayal. For example, the study conducted by Scherr and Reinemann (2011) found no differences between the two groups on self-reported suicide risk following one group viewing a music video that ended in a graphic depiction of a suicide, however, they did find that participants in the experimental group rated the suicide risk for others as higher than those in the control group, suggesting a 'presumed Werther effect'.

### 3.7 | Suicide literacy: knowledge, awareness, attitudes, help-seeking and helping others

Five studies (30%) found evidence for positive impacts such as increased suicide literacy (suicide awareness, stigma reduction, more positive attitudes and help-seeking behaviour) following exposure.

Some researchers found evidence of beneficial effects of viewing the *13 Reasons Why* series, particularly among certain viewers such as those who watched the entire second season, female viewers and those who reported greater suicidal ideation and who subsequently reported increased help-offering behaviour. For example, in addition to increased internet searching of ways to die by suicide, Ayers et al. (2017) found the release of *13 Reasons Why* to lead to increases in numbers of people searching for 'suicide prevention' and 'suicide hotlines'. Arendt et al. (2019) found that those who watched the entire second season of *13 Reasons Why* experienced higher levels of optimism, and females who watched the series reported reduced suicide acceptance. Exposure to other suicidal stories among

viewers was associated with visiting the help-site which accompanied the second season. Finally, those viewers who reported greater suicidal ideation were more likely to report helping suicidal others (Arendt et al., 2019).

Increased help-seeking among young people and adults was reported in some of the literature regarding documentaries and television series. Significant increases (from baseline to follow-up) in help-seeking were observed in an RCT ( $n = 337$ ) where the intervention group watched a documentary (*Man Up*) regarding masculinity, mental health and suicidality, which portrayed men speaking about their experiences of mental distress and suicidality (King et al., 2018). However, in another study by the same researchers (Schlichthorst et al., 2018), found that viewing *Man Up* did not increase likelihood of help-seeking. It should, however, be noted that although this study had a greater sample size ( $n = 476$  pre-viewing and  $n = 619$  post-viewing), it was less methodologically rigorous than the RCT and rather than surveying the same individuals before and after viewing the documentary as King et al. (2018) did, Schlichthorst et al. (2018) did not follow the same participants over time.

In the Hong et al. (2018) study of young people presenting to emergency departments, they found that equal proportions of participants reported that *13 Reasons Why* made them both more (28%) and less (28%) likely to talk to others about their mental health and suicidal thoughts (Hong et al., 2018). However, 80% reported discussing the series with their friends, 34% reported discussing with their parents and of the participants who spoke with their parents about the series,  $n = 7$  reported discussing the topic of suicide. Therefore, the series clearly prompted some discussion and depending on how this conversation was received, might determine whether such discussion could lead to desirable outcomes, for example, help-seeking attitudes or stigma reduction (Hong et al., 2018).

In another study of a documentary portraying suicide, *The Bridge* was found to increase understanding of suicide and significantly reduce the belief that there is nothing one can do to help if someone has a suicide plan, among a group of medical students ( $n = 180$ ; Retamero et al., 2014).

### 3.8 | Emotional and psychological changes

Emotional distress and other psychological impacts of suicide portrayals were reported in several studies; however, emotional distress and these other constructs did not necessarily correspond to suicidal ideation or behaviour.

In a large cross-sectional survey of young people ( $n = 7,004$ ) who were asked questions about changes in mood and suicidality resulting from viewing *13 Reasons Why*, it was found that 23.7% reported a worsening of mood after viewing. Importantly, worsening of mood was related to increased risk of suicide among this sample (Rosa et al., 2019). Those participants who reported past suicidal ideation, self-harm and suicide attempts reported a greater worsening of mood.

## 4 | DISCUSSION

This review examined the evidence regarding the impact of portraying suicide in moving-image fiction and non-fiction media on the consumer/viewer of that media. Given that the emphasis of previous reviews has been on looking at the impact of mixed and varied forms of media portrayals of suicide, we deemed it important to consider the specific impacts of screen/ moving-image portrayals of suicide on viewers. This was considered to be of importance in contemporary society given the increased availability of moving-image media through internet screening of television, movies and documentaries, and given changes in the ways in which viewers engage with this media, for example, by so called 'binge watching'.

From a total of 16 articles that were identified in the literature from the past 10 years, the majority of these were in relation to fictional media ( $n = 13$ ) versus non-fiction ( $n = 3$ ). The literature highlighted that the portrayal of suicide in moving-image media can impact on a viewer's suicidal ideation and behaviour, suicide literacy, such as knowledge/awareness and help-seeking attitudes and behaviour leading to emotional distress and psychological impacts. Key individual differences that may influence the relationship between viewing a screen portrayal of suicide and subsequent suicidality include level of identification with the protagonist in terms of social demographic similarities and levels of empathy that the viewer has towards the protagonist. Pre-existing histories of suicidal ideation and suicidal behaviour also appear to be important considerations as these viewers may be more vulnerable to the negative impacts, however, depending on the way in which suicide is portrayed (e.g. a protagonist overcoming a suicidal crisis and seeking help), may also increase the possible beneficial effects of the portrayal such as increased help-offering to suicidal others.

It is important to note that the relationship between exposure and outcome is clearly not a simple one, as some studies found that portrayals of suicide could lead to both increases and decreases in suicidal ideation and behaviour depending on several factors including the individual characteristics of the viewer. Individuals with histories of past suicidal ideation and suicide attempts may be more affected by portrayals of suicide in screen media. For example, Till et al. (2015) found that a fictional film with a suicide scene increased suicidality among those with higher baseline vulnerability and suicidal ideation, versus no change in overall suicidality for the sample when considered as a whole. However, there were inconsistencies in this finding. For example, for participants with histories of suicidal ideation in the study by Zimerman et al. (2018), 59.2% reported a reduction in suicidal ideation after watching *13 Reasons Why* (season 1). The survey by Zimerman et al. (2018) is limited by the cross-sectional design making us unable to draw conclusions about causal directions and by retrospective reporting (after having watched the series). The sample was also mostly female (89.4%) and had a mean age of 15 years, so the findings may be mostly relevant to young females with histories of suicidal ideation.

The findings regarding identification, although inconsistent, may add to the understanding of how characteristics of the viewer influence the relationship between portrayal and outcome. Some findings reported that stronger identification with the protagonist leads to increased likelihood of experiencing adversity as a result of the exposure. While Till, Vitouch, et al. (2013) found no association between identification and suicidality, they did find that identification is not always in relation to socio-demographic similarity but can relate to the level of empathy that the viewer possesses. Till et al. (2015) found that baseline suicidal ideation was strongly associated with level of identification with the protagonist and that those who more strongly identified with the protagonist, experienced a greater increase in suicidality resulting from the exposure. Viewer similarity to the protagonist and viewers' depression level has been previously found to influence interest in the story (print media) with depression in the viewer increasing intention to read similar material in the future through identification with the role model (Niederkrotenthaler, Arendt, & Till, 2015).

In the study by Scherr and Reinemann (2011), no direct impact of the graphic depiction of suicide in the music video was found. The lack of a direct adverse impact could be time-related, given that the length of exposure was relatively short. However, previous research has found that exposure to media reporting of suicide, including through television news stories can lead to contagion effects, and presumably these news stories can be relatively short. Of the studies included in this review, consideration of the duration of the exposure to suicidal content was not adequately explored.

The heterogeneity of types of suicide portrayals is an important limitation of this review and of the evidence in general. This is beyond length of exposure and whether there are Papageno effects or positive messages embedded within the film/series/documentary. Outcome of the protagonist is also an important factor to consider as evidenced by the studies by Till et al. (2015) and Arendt et al. (2019). Past research has found that news stories about completed suicides rather than ideation and attempts were associated with greater subsequent suicidal behaviour (Pirkis et al., 2006).

The research also examines potential positive impacts of portrayal of suicide in media in terms of suicide awareness, stigma reduction, modelling of preferred language to use when talking about suicide and help-seeking behaviour. The findings that those who viewed the entire second season of *13 Reasons Why* experienced benefits and were at lower risk of suicide than those who viewed only some of the season suggests that there was an element that counteracted the suicidal content that could be accessed by watching the season in its entirety or the end part of the season. Arendt et al. (2019) considered whether the positive message of the protagonist's mother saying that 'staying alive is always better than ending it', which appeared to help another key character overcome his own suicidal thoughts, was an important protective element. This theory is also consistent with the findings from Till et al. (2015) that for those randomised to view the film featuring the protagonist

positively coping with a suicidal crisis, those with higher suicidal tendencies experienced more beneficial effects such as increased satisfaction with life.

There is evidence that fictional stories portraying suicide result in less imitation effects than non-fiction (Stack, 2005). Interestingly, of the non-fiction studies included, the results did not find evidence of negative impacts of portrayals of suicide, however, given the large body of work that has found non-fiction television or internet news reporting of deaths by suicide to be associated and followed by increases in imitative suicidal behaviour, the finding regarding non-fiction media in this review is more likely due to the low numbers of studies examining moving-image media on its own (and within the last 10 years) than any real differences between fiction and non-fiction. Furthermore, the studies by King et al. (2018) and Schlichthorst et al. (2018), although robust, did not measure personal suicidality and the findings relevant to this review were limited to suicide literacy, specifically, help-seeking behaviour. It should also be noted that given that a large proportion of the evidence included in this review related to the series *13 Reasons Why*, for which the study participants were generally adolescents and majority female, our findings might be particularly pertinent to young females.

#### 4.1 | Implications and future research

There is evidence for imitation and contagion effects arising from moving-image media portraying suicide which appears to be stronger under certain conditions. Taken together, these studies highlight that for some people and for some types of exposure, the risk of these portrayals leading to harmful outcomes are higher. Every viewer engages differently with media and this alters the potential outcomes. For individuals with higher levels (or histories) of depression, suicidality, dissociation, thought suppression and levels of identification with the protagonist, the potential harmful effects of viewing such media may be greater. In some instances, and for some people, narratives of hope, seeking help and portrayals of an individual overcoming or positively coping with a suicidal crisis can lead to positive outcomes. However, it remains unclear whether these potential benefits are enough to outweigh the potential harmful effects, for which there appears to be a larger evidence base. The WHO have recently published a resource regarding screen and stage portrayals of suicide which identifies ways in which positive impacts of portrayals of suicide in such media can be increased, and the potential negative impacts can be minimised (World Health Organization, 2019). Consistent with our findings, they suggest portrayals emphasise the importance of seeking help, looking after oneself and others, and shares a message of hope. More research is clearly needed on the impact of portraying suicide in non-fiction screen media such as documentaries. The current evidence makes it difficult to determine the impact of

documentary portrayals of suicide on viewer suicidality due to the current studies regarding non-fiction documentaries not directly measuring suicidal ideation or behaviour in the viewers and instead only measuring suicide literacy outcomes (awareness, attitudes, help seeking).

#### 4.2 | Strengths and limitations

The strengths of this review include the comprehensiveness of the searches conducted, the specific focus on this type of media and the rigorous study selection process. The review team were independent researchers with no conflict of interest in the topic. The articles included in this review were of varying methodological quality and therefore the findings need to be considered in light of this. The reliance on self-reported outcome measures in almost all the studies included may be seen as a limitation, however, the self-report measures used were almost all reliable and valid measures of the outcomes of interest, for example, suicidality. Because of the rapid review methodology enabling a more efficient search, the narrowed date range and exclusion of studies not published in English or grey literature may mean that some relevant studies may have been excluded.

### 5 | CONCLUSION

The literature reported varying impacts of portrayals of suicide through moving-image media such as increased suicidal ideation and behaviour, as well as positive impacts such as increased help-seeking behaviour. While there is limited evidence which focuses specifically on the impact of moving-image media, the studies included in this review highlight concerning trends regarding the impact of media portraying deaths by suicide on subsequent suicidality. However, positive impacts on suicide awareness, literacy and help-seeking behaviour were also identified.

#### ACKNOWLEDGEMENT

This work was supported by the South Australian Premier's Advocate for Suicide Prevention and the Government of South Australia.

#### CONFLICTS OF INTEREST

The authors have no conflicts of interest.

#### ORCID

Miriam Posselt  <https://orcid.org/0000-0003-1668-9933>

Heather McIntyre  <https://orcid.org/0000-0001-8475-769X>

Nicholas Procter  <https://orcid.org/0000-0002-7289-3165>

#### TWITTER

Miriam Posselt  @MiriamPosselt

Heather McIntyre  @HeatherEaton01

Nicholas Procter  @MHRresearchUniSA

## REFERENCES

- Arendt, F., Scherr, S., Pasek, J., Jamieson, P. E., & Romer, D. (2019). Investigating harmful and helpful effects of watching season 2 of "13 Reasons Why": Results of a two-wave U.S. panel survey. *Social Science & Medicine*, 232, 489–498. <https://doi.org/10.1016/j.socscimed.2019.04.007>
- 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.
- Cooper, M. T., Bard, D., Wallace, R., Gillaspay, 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. <https://doi.org/10.1016/j.jadohealth.2018.08.028>
- Hong, V., Ewell Foster, C. J., Magness, C. S., McGuire, T. C., Smith, P. K., & King, C. A. (2018). "13 Reasons Why": Viewing patterns and perceived impact among youths at risk of suicide. *Psychiatric Services*, 70, 107–114.
- Jamieson, P. E., & Romer, D. (2011). Trends in explicit portrayal of suicidal behavior in popular US movies, 1950–2006. *Archives of Suicide Research*, 15, 277–289. <https://doi.org/10.1080/13811118.2011.589748>
- King, K., Schlichthorst, M., Reifels, L., Keogh, L., Spittal, M. J., Phelps, A., & Pirkis, J. (2018). Impacts of a documentary about masculinity and men's health. *American Journal of Men's Health*, 12, 1604–1614. <https://doi.org/10.1177/1557988318777927>
- Mindframe. (2019). *Communicating about suicide*. Retrieved from <https://mindframe.org.au/suicide/communicating-about-suicide>
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *PLoS Med*, 6(7), e1000097. <https://doi.org/10.1371/journal.pmed.1000097>
- Moola, S., Munn, Z., Tufanaru, C., Aromataris, E., Sears, K., Sfetcu, R., ... Mu, P. F. (2017). Chapter 7: Systematic reviews of etiology and risk. In E. Aromataris, & Z. Munn (Eds.), *Joanna Briggs Institute reviewer's manual*. The Joanna Briggs Institute. Retrieved from <https://reviewersmanual.joannabriggs.org/>
- Niederkrotenthaler, T., Arendt, F., & Till, B. (2015). Predicting intentions to read suicide awareness stories: The role of depression and characteristics of the suicidal role model. *Crisis*, 36, 399–406.
- Niederkrotenthaler, T., King-Wa, F., Yip, P. S. F., Fong, D. Y. T., Stack, S., Qijin, C., & Pirkis, J. (2012). Changes in suicide rates following media reports on celebrity suicide: A meta-analysis. *Journal of Epidemiology & Community Health*, 66, 1037–1042. <https://doi.org/10.1136/jech-2011-200707>
- Pirkis, J., & Blood, R. W. (2001a). Suicide and the media: Part I. Reportage in nonfictional media. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 22, 146–154. <https://doi.org/10.1027//0227-5910.22.4.146>
- Pirkis, J., & Blood, R. W. (2001b). Suicide and the media: Part II. Portrayal in fictional media. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 22, 155–162. <https://doi.org/10.1027//0227-5910.22.4.155>
- Pirkis, J., Burgess, P. M., Francis, C., Blood, R. W., & Jolley, D. J. (2006). The relationship between media reporting of suicide and actual suicide in Australia. *Social Science & Medicine*, 62, 2874–2886. <https://doi.org/10.1016/j.socscimed.2005.11.033>
- Pouliot, L., Mishara, B. L., & Labelle, R. (2011). The Werther Effect reconsidered in light of psychological vulnerabilities: Results of a pilot study. *Journal of Affective Disorders*, 134, 488–496. <https://doi.org/10.1016/j.jad.2011.04.050>
- Retamero, C., Walsh, L., & Otero-Perez, G. (2014). Use of the film "The Bridge" to augment the suicide curriculum in undergraduate medical education. *Academic*, 38, 605–610. <https://doi.org/10.1007/s40596-014-0086-y>
- Rosa, G. S. D., Andrades, G. S., Caye, A., Hidalgo, M. P., Oliveira, M. A. B. D., & Pilz, L. K. (2019). "Thirteen Reasons Why": The impact of suicide portrayal on adolescents' mental health. *Journal of Psychiatric Research*, 108, 2–6. <https://doi.org/10.1016/j.jpsychires.2018.10.018>
- Scherr, S., & Reinemann, C. (2011). Belief in a Werther Effect: Third-person effects in the perceptions of suicide risk for others and the moderating role of depression. *Suicide & Life-threatening Behavior*, 41, 624–634. <https://doi.org/10.1111/j.1943-278X.2011.00059.x>
- Schlichthorst, M., King, K., Spittal, M., Reifels, L., Phelps, A., & Pirkis, J. (2018). Using a television documentary to prevent suicide in men and boys. *Australas Psychiatry*, 26, 160–165. <https://doi.org/10.1177/1039856217749022>
- Stack, S. (2005). Suicide in the media: A quantitative review of studies based on nonfictional stories. *Suicide and Life-Threatening Behavior*, 35, 121–133. <https://doi.org/10.1521/suli.35.2.121.62877>
- Stack, S., Kral, M., & Borowski, T. (2014). Exposure to suicide movies and suicide attempts: A research note. *Sociological Focus*, 47, 61–70. <https://doi.org/10.1080/00380237.2014.856707>
- Till, B., Herberth, A., Sonneck, G., Vitouch, P., & Niederkrotenthaler, T. (2013). Who identifies with suicidal film characters? Determinants of identification with suicidal protagonists of drama films. *Psychiatria Danubina*, 25, 158–162.
- Till, B., Niederkrotenthaler, T., Herberth, A., Vitouch, P., & Sonneck, G. (2010). Suicide in films: The impact of suicide portrayals on nonsuicidal viewers' well-being and the effectiveness of censorship. *Suicide & Life-Threatening Behavior*, 40, 319–327. <https://doi.org/10.1521/suli.2010.40.4.319>
- Till, B., Strauss, M., Sonneck, G., & Niederkrotenthaler, T. (2015). Determining the effects of films with suicidal content: A laboratory experiment. *British Journal of Psychiatry*, 207, 72–78. <https://doi.org/10.1192/bjp.bp.114.152827>
- Till, B., Vitouch, P., Herberth, A., Sonneck, G., & Niederkrotenthaler, T. (2013). Personal suicidality in reception and identification with suicidal film characters. *Death Studies*, 37, 383–392. <https://doi.org/10.1080/07481187.2012.673531>
- Tricco, A. C., Langlois, E. V., & Straus, S. E. (2017). *Rapid reviews to strengthen health policy and systems: A practical guide*. Geneva: World Health Organization.
- Watt, A., Cameron, A., Sturm, L., Lathlean, T., Babidge, W., Blamey, S., ... Maddern, G. (2008). Rapid versus full systematic reviews: Validity in clinical practice? *ANZ Journal of Surgery*, 78, 1037–1040. <https://doi.org/10.1111/j.1445-2197.2008.04730.x>
- World Health Organisation. (2017). *Preventing suicide: A resource for media professionals*. Retrieved from <https://apps.who.int/iris/bitstream/handle/10665/258814/WHO-MSD-MER-17.5-eng.pdf;jsessionid=EA2BA13A8300BC1B642A8BF8A5A36A05?sequence=1>
- World Health Organization. (2018). *Mental health: Suicide data*. Retrieved from [https://www.who.int/mental\\_health/prevention/suicide/suicideprevent/en/](https://www.who.int/mental_health/prevention/suicide/suicideprevent/en/)
- World Health Organization. (2019). *Preventing suicide: A resource for filmmakers and others working on stage and screen* (No. WHO/MSD/MER/19.4). World Health Organization.
- Zimmerman, A., Caye, A., Zimmerman, A., Salum, G. A., Passos, I. C., & Kieling, C. (2018). Revisiting the Werther Effect in the 21st Century: Bullying and suicidality among adolescents who watched "13 Reasons Why". *Journal of the American Academy of Child & Adolescent Psychiatry*, 57, 610–613. <https://doi.org/10.1016/j.jaac.2018.02.019>

## SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section.

**How to cite this article:** Posselt M, McIntyre H, Procter N.

The impact of screen media portrayals of suicide on viewers: A rapid review of the evidence. *Health Soc Care Community*.

2020;00:1–14. <https://doi.org/10.1111/hsc.13112>