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Pandemic practice: Horror fans and morbidly curious individuals are more psychologically resilient during the COVID-19 pandemic



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ABSTRACT

One explanation for why people engage in frightening fictional experiences is that these experiences can act as simulations of actual experiences from which individuals can gather information and model possible worlds. Conducted during the COVID-19 pandemic, this study ($n = 310$) tested whether past and current engagement with thematically relevant media fictions, including horror and pandemic films, was associated with greater preparedness and psychological resilience toward the pandemic. Since morbid curiosity has previously been associated with horror media use during the COVID-19 pandemic, we also tested whether trait morbid curiosity was associated with pandemic preparedness and psychological resilience during the COVID-19 pandemic. We found that fans of horror films exhibited greater resilience during the pandemic and that fans of “prepper” genres (alien-invasion, apocalyptic, and zombie films) exhibited both greater resilience and preparedness. We also found that trait morbid curiosity was associated with positive resilience and interest in pandemic films during the pandemic. Taken together, these results are consistent with the hypothesis that exposure to frightening fictions allow audiences to practice effective coping strategies that can be beneficial in real-world situations.

1. Introduction

“A good horror story is one that functions on a symbolic level, using fictional (and sometimes supernatural) events to help us understand our own deepest real fears.” (King, 2011).

Intentionally exposing oneself to fearful situations is, on its face, a peculiar phenomenon. An empirically supported explanation for why people engage in frightening fictional experiences is that these experiences can act as simulations of actual experiences from which individuals can gather information and model possible worlds (Clasen, 2017; Clasen, Kjeldgaard-Christiansen, & Johnson, 2018; Mar & Oatley, 2008; Morin, Acerbi, & Sobchuk, 2019). In a simulated experience, such as an oral story, a novel or a film, one can explore possible futures or phenomena, gathering information about what the real version of such an experience would look like, and learn how to prepare for analogous situations in the real world (Scalise-Sugiyama, 2001).

In this way, engaging with imagined worlds through fiction is functionally analogous to various kinds of play. For example, rough-and-tumble play has been hypothesized to have evolved in part because

it safely simulates dangerous situations (Boulton & Smith, 1992). Through engaging in rough-and-tumble play, animals can develop and practice the use of cognitive and motor skills required for facing actual dangerous confrontations in adulthood (Kniffin & Scalise-Sugiyama, 2018; Scalise-Sugiyama, Mendoza, White, & Sugiyama, 2018). Similarly, fitness-relevant information can be learned through cognitive play with stories (Johnson, Carroll, Gottschall, & Kruger, 2011; Morin et al., 2019; Scalise-Sugiyama, 2005; Smith et al., 2017; van Krieken, 2018).

Take, for example, a film about a pandemic. A pandemic film gives viewers low-cost access to important information that is difficult or dangerous to come across in the real world. For example, how do other people act in the face of a pandemic? Are such events likely to prompt cooperative or selfish behavior in others? How might one navigate the altered social landscape of a pandemic world? What does the world look like when institutions that act as cornerstones of everyday existence no longer operate as usual? Should a pandemic ever occur, this information could be quite valuable. The hypothesis that pandemic and apocalyptic fiction can provide adaptive simulations of catastrophic

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scenarios has been suggested theoretically (Clasen, 2019), but has not yet been empirically tested.

The most important part of many stories may not be their literal similarity to real life, but the meaning that can be extracted from them and applied to real world situations (Biesele, 1986). Although zombies do not exist and thus represent no real threat to humans, situations that occur in zombie movies may be analogous to situations that would occur in real-world events. The widespread chaos that occurs in zombie films is in many ways similar to the widespread chaos that can occur during real-world disasters. Thus, the information we obtain vicariously from an imagined zombie apocalypse may serve us in analogous situations in the real world (Clasen, 2017).

Simulation is useful because it can substantially reduce the cost of exploring, experiencing, and learning about some phenomenon, particularly if that phenomenon is dangerous. This shift in the cost-benefit ratio decreases the motivation required for one to explore the phenomenon in question. Likewise, stories with more relevance to the current state of the world are often more popular, reflecting the possible functional purpose of stories (Scalise-Sugiyama, 2019). One recent example of this might be the massive surge in popularity of the film *Contagion* in the early weeks of the COVID-19 pandemic. Though the film was nearly a decade old, it quickly became one of the most streamed movies in America, presumably due to the fact that it provides a realistic example of what happens during a viral pandemic (Mack, 2020).

Still, engaging with a mental simulation of a dangerous situation is not cost-free. Mental simulation of dangerous phenomena can bring about unpleasant emotions and comes with a non-trivial time-commitment. The extent to which an individual is motivated to learn about the dangerous situations in life may be described as morbid curiosity (Scrivner, 2020a, 2020b). In line with the simulation account, Scrivner (2020b) found that individuals high in trait morbid curiosity became much more interested in pandemic-themed films in the early weeks of the COVID-19 outbreak than less morbidly curious individuals. Through a greater propensity to gather information about dangerous phenomena, morbidly curious individuals may accrue a larger repertoire of knowledge and emotional coping strategies that would be useful in dangerous situations.

In addition to learning how to navigate dangerous situations through simulations, people may also learn to navigate their own emotions. Indeed, previous research has demonstrated that visitors in a commercial haunted house actively use a range of emotion regulation strategies to regulate fear levels and achieve maximum pleasure (Clasen, 2019). Presumably, frequent users of horror media often employ emotion regulation strategies, which may lead to improved emotional coping skills. In particular, voluntary use of horror entertainment may lead to less reliance on avoidance mechanisms in response to fear, which have been shown to be associated with poor psychological outcomes when used in response to certain fears, including viral outbreaks (Dillard, Yang, & Li, 2018; Petzold et al., 2020). Horror fiction allows people to safely and frequently experience fear, which is typically experienced in the presence of real danger. By eliciting fear in a safe setting, horror fiction presents an opportunity for audiences to hone their emotion regulation skills (Kerr, Siegle, & Orsini, 2019; Lobel et al., 2016; Schartau, Dalgleish, & Dunn, 2009). Emotion regulation skills have, in turn, been shown to be associated with increased psychological resilience (Mestre, Núñez-Lozano, Gómez-Molinero, Zayas, & Guil, 2017; Tugade & Fredrickson, 2004).

1.1. Present research

Through engaging often with frightening fictional experiences, horror fans and morbidly curious individuals can gather information and practice emotion regulation skills that may benefit them in dangerous real-world scenarios. With regard to COVID-19, individuals who have spent more time simulating frightening or dystopian experiences

in the past may experience less psychological distress during the pandemic. Likewise, those who are motivated to seek out dangerous information (i.e., the morbidly curious) may experience greater resilience during the pandemic.

In this study, we tested the hypothesis that morbidly curious individuals and horror fans exhibit greater psychological resilience during the COVID-19 pandemic. We also investigated whether or not those who watched more pandemic films specifically exhibited greater resilience and preparedness for the COVID-19 pandemic. While fiction can exist in several forms, we opted to study films since films are a particularly popular medium. We predicted that 1) horror fans would be more psychologically resilient during the COVID-19 pandemic, 2) those who score high in trait morbid curiosity would be more psychologically resilient during the pandemic, and 3) watching more pandemic films would be associated with greater preparedness and psychological resilience during the COVID-19 pandemic.

2. Method

2.1. Participants

We recruited 322 US participants from Prolific for a study on Personality, Media, and Current Events. Participants were recruited in April 2020, about a month after COVID-19 was declared a global pandemic. Participants were recruited during this time because it was early in the pandemic, when there was still a lot of uncertainty about what was happening. The sample size required to detect a small effect size ($r = 0.20$) with 95% power ($\alpha = 0.05$) was 314; we recruited slightly more in anticipation that some may fail attention checks. Five participants were removed for failing attention checks. Since sex was used as a predictor in some analyses, participants who answered something other than male or female ($n = 7$) were excluded from analyses ($n_{\text{final}} = 310$).

2.2. Measures

2.2.1. Genre questions

Participants were asked to what extent they agreed (7-point scales, strongly disagree to strongly agree) with each of 10 statements that said, "I would consider myself a fan of ____ movies and TV shows." The 10 types of movies and TV shows were horror, zombie, psychological thriller, supernatural, apocalyptic/post-apocalyptic, science fiction, alien-invasion, crime, comedy, and romance. Since simulations should work best when they present information relevant to real-world situations, we combined the genres where the imagined world is illustrative of the chaos that might occur in a real-world pandemic (zombie, apocalyptic/post-apocalyptic, and alien-invasion) into a "prepper genres" variable. Only the prepper and horror genre variables were of interest in the analysis; the other genre variables were used to mask the intent of the study. Participants were also asked to rate the extent to which they agreed (7-point scales, strongly disagree to strongly agree) with a statement of generic enjoyment of video entertainment, "I enjoy watching movies and TV shows." Since greater enjoyment of horror films could be a side effect of greater enjoyment for films in general, this item was used as a control in regression models.

2.2.2. Pandemic-specific questions

Participants were also asked about their past use of and current interest in pandemic movies. The past use question asked, "Which of the following best describes you?" Answer choice options were, "I have ____ pandemic films" (never seen; seen one or two; seen several; seen many). The current interest question asked, "Which of the following best describes you?" The answer choice options were, "Currently, I am ____ in pandemic films" (not interested; slightly interested; somewhat interested; very interested).

Table 1
Factor loadings of the 12-item PPRS

Items	Factor Loadings	
	Positive	Negative
During the pandemic, I have been more depressed than usual.	-0.09	0.81
Compared to how I usually feel, I have been more nervous and anxious during the pandemic.	0.03	0.72
I am more irritable than usual.	0.07	0.83
I haven't been sleeping well since the pandemic started.	-0.09	0.52
I have been taking the news about the pandemic in stride.	0.49	-0.06
I have been able to find things to enjoy during the pandemic.	0.40	-0.19
I feel positive about the future.	0.58	-0.10
I have found some aspects of the pandemic to be interesting.	0.44	0.02
I believe in my ability to get through these difficult times.	0.95	0.05
I know that I can get through these uncertain times.	0.90	0.01
Life has felt meaningful during the pandemic.	0.35	-0.19
Cronbach's alpha	0.83	0.82
Inter-item Correlation (<i>M</i>)	0.39	0.53

Note: Bold numbers indicate a factor loading > 0.30.

2.2.3. Psychological resilience

Though some general event-resilience scales exist, they are not well-suited for studying psychological resilience to a pandemic. For example, the Impact of Events Scale revised (IES-R; Weiss & Marmar, 1996) is a widely-used measure of distress, but it is intended for use with singular events, such as a natural disaster or terrorist attack. The scale is not well-suited for a long-term event with a somewhat abstract threat (e.g., a pandemic). In this study, we operationalize resilience as the ability to have more positive experiences/emotional states (*positive resilience*) or fewer negative experiences/emotional states (*psychological distress*).

To properly assess this conceptualization of psychological resilience during the pandemic, we created a 13-item scale that we refer to as the Pandemic Psychological Resilience Scale (PPRS). Participants were instructed to rate on a 7-point scale (strongly disagree to strongly agree) how much they agreed or disagreed with each of 13 statements (Table 1).

2.2.4. Preparedness for the pandemic

In addition to helping cope with future difficult situations, simulations would presumably also help prepare for them. This means that the individual who simulated pandemic experiences more often through fiction might be better equipped to anticipate a pending pandemic, foresee its downstream effects, and prepare for it by obtaining the proper material resources in the early stages of the pandemic. To assess preparedness, participants rated on a 7-point scale (strongly disagree to strongly agree) how much they agreed or disagreed with each of the six statements (Table 2). A sixth statement ("I used what I've seen in movies or read in novels to help me know how to deal with the Coronavirus (COVID-19) pandemic") was excluded from analysis because of its high degree of similarity to the prediction about using movies to prepare for pandemics.

Table 2
Factor loadings of the 5 items in the preparedness scale.

Items	Factor loadings
I was mentally prepared for a pandemic like the Coronavirus (COVID-19) pandemic.	0.31
I was able to predict how bad things would get due to the Coronavirus (COVID-19) pandemic before things really took off.	0.58
The magnitude of the consequences of the Coronavirus (COVID-19) outbreak took me by surprise. (–)	0.85
I knew early on which items I should buy in preparation for a pandemic like the Coronavirus (COVID-19) pandemic.	0.34
I never could have imagined that a viral outbreak would have consequences like the Coronavirus (COVID-19) outbreak. (–)	0.79
Cronbach's alpha	0.73
Inter-item correlation (<i>M</i>)	0.35

2.2.5. Morbid curiosity

Trait morbid curiosity was measured using the Morbid Curiosity Scale (Scrivner, 2020a). Morbid curiosity has been defined as a trait that motivates a person to learn about dangerous or threatening phenomena (Scrivner, 2020a, 2020b). The Morbid Curiosity Scale is a 24-item assessment that is used to measure trait morbid curiosity as well as the four sub-factors of morbid curiosity. Only the total score from the Morbid Curiosity Scale was calculated and used in analyses.

2.2.6. Five-Factor Model of Personality

To control for general domains of personality in regression models, participants completed the Ten Item Personality Measure (TIPI; Gosling, Rentfrow, & Swann Jr, 2003). The TIPI contains two items for each domain of the Five-Factor Model of personality (FFM). The TIPI has been evaluated for reliability and validity with respect to its convergence with the longer form questionnaires that measure the FFM (Ehrhart et al., 2009).

3. Results

All data and analysis code used for this study are available on the Open Science Framework (https://osf.io/x524h/?view_only=adc26f2047394fde83d04ca5f3d58212). Descriptive statistics for main variables of interest can be found in Supplementary Table 1. Zero-order correlations for all variables, including other genres, can be found in Supplementary Table 2.

3.1. Exploratory factor analysis on the PPRS and preparedness items

We first conducted exploratory factor analysis on the PPRS using the *psych* package in R (Revelle, 2017). Using Mahalanobis distance ($X^2(13) = 34.53$), six outliers were detected and removed from further analysis ($n_{\text{final}} = 304$). Bartlett's test indicated correlation adequacy ($X^2(78) = 1731.01$, $p < 0.001$) and the Kaiser-Meyer-Olkin (KMO) test indicated that data were suitable for EFA ($MSA = 0.89$). Visual inspection of a scree plot suggested two factors for the PPRS items. Maximum likelihood estimation was used with direct oblimin (oblique) rotation to examine factor structure. Using a factor loading criterion of 0.30, one item loaded on both factors and was removed from further analysis. After removing it, the model achieved simple structure (Table 1). The items grouped into two types of resilience: positive (*positive resilience*) and negative (*psychological distress*). Items that loaded onto the positive resilience factor assessed an individual's ability to experience positive emotional states and outlooks during the pandemic. Items that loaded onto the psychological distress factor pointed to a disruption in day-to-day life, such as higher than usual depression, anxiety, irritability, and sleeplessness. The two factors were negatively correlated ($r = -0.46$). With psychological distress reverse-coded, the scale as a whole demonstrated good internal reliability (Cronbach's $\alpha = 0.86$), as did each subscale (positive resilience $\alpha = 0.83$; psychological distress $\alpha = 0.82$).

Exploratory factor analysis was also conducted on the five preparedness scale items using the same method as described above. Using Mahalanobis distance ($X^2(5) = 20.52$), one outlier was detected and

removed from further analysis ($n_{\text{final}} = 309$). Bartlett's test indicated correlation adequacy ($X^2(10) = 395.29, p < 0.001$) and the Kaiser-Meyer-Olkin (KMO) test indicated that data were suitable for EFA ($MSA = 0.69$). A scree plot suggested a single factor for preparedness, with each item loading onto the factor at 0.30 or higher (Table 2). The scale demonstrated adequate internal reliability ($\alpha = 0.73$).

3.2. Test-retest reliability of the PPRS

In order to obtain further information about the reliability of the PPRS, we invited all of the original participants ($n = 322$) to complete a second survey containing the PPRS questions one month after the first survey. A total of 255 participants completed the second survey for a retention rate of 79%. Three participants were removed for failing an attention check. After combining the datasets and removing anyone who failed an attention check in either survey, 244 participants remained. Participants' scores on the positive resilience and psychological distress subscales at one month correlated strongly with their initial scores ($r = 0.70$ and 0.77 , respectively), providing further evidence that the PPRS is a reliable measure of psychological resilience during a pandemic.

We conducted multiple regression models to test the relationship between each genre and our main outcomes of interest: positive resilience, psychological distress, and preparedness. Nine control variables were included in each genre model: sex, age, income, how much the participant said they enjoyed watching movies and TV shows in general, and each TIPI dimension.

3.3. Horror fans

Being a horror fan was unrelated to positive resilience ($b = 0.03, SE = 0.02, t = 1.21, p = 0.225$) and preparedness ($b = 0.05, SE = 0.06, t = 1.50, p = 0.134$). However, consistent with our predictions, horror fandom was significantly associated with lower psychological distress ($b = -0.10, SE = 0.03, t = -2.77, p = 0.006$; Table 3).

3.4. Prepper genre fans

As predicted, fans of prepper genres (zombie, apocalyptic/post-apocalyptic, and alien-invasion) were significantly more prepared for

Table 3
Key findings.

Outcomes	Horror fan			
	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Positive resilience	0.03	0.02	1.21	0.225
Psychological distress	-0.10	0.03	-2.77	0.006
Preparedness	0.05	0.06	1.50	0.134
Outcomes	Prepper genre fan			
	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Positive resilience	0.05	0.03	1.66	0.098
Psychological distress	-0.11	-0.05	-2.18	0.030
Preparedness	0.11	0.04	2.48	0.014
Outcomes	Morbid curiosity			
	<i>b</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Positive resilience	0.20	0.05	3.74	< 0.001
Psychological distress	-0.06	0.08	-0.70	0.483
Preparedness	0.02	0.08	0.20	0.841

the pandemic ($b = 0.11, SE = 0.04, t = 2.48, p = 0.014$) and experienced fewer negative disruptions in their life during the pandemic ($b = -0.11, SE = -0.05, t = -2.18, p = 0.030$; Table 3). However, being a fan of prepper genres was unrelated to positive resilience ($b = 0.05, SE = 0.03, t = 1.66, p = 0.098$).

3.5. Consumption of pandemic films

When considering past use of pandemic films, 72 participants said they had never seen one, 143 said they had seen one or two, 73 said they had seen several, and 22 said they had seen many. An ANCOVA controlling for TIPI, sex, age, and income indicated that use of pandemic films in the past was significantly related to preparedness for the pandemic ($F(3, 298) = 4.73, p = 0.003$). A Tukey's HSD test revealed that participants who had never seen a pandemic film felt significantly less prepared for the pandemic than those who had seen several ($p_{\text{adj}} = 0.025$) or many ($p_{\text{adj}} = 0.006$) pandemic films (Fig. 1). Contrary to our predictions, past use of pandemic films was not related to psychological distress ($F(3, 298) = 1.95, p_{\text{adj}} = 0.122$) or positive resilience ($F(3, 298) = 0.46, p_{\text{adj}} = 0.711$).

When considering their current interest in pandemic films, 123 participants said they were not interested, 89 said they were slightly interested, 66 said they were moderately interested, and 32 said they were very interested. An ANCOVA including the same controls as the past use model indicated that current interest in pandemic films was significantly associated with positive resilience ($F(3, 298) = 4.00, p = 0.008$), but not psychological distress ($F(3, 298) = 1.24, p = 0.297$) or preparedness ($F(3, 298) = 0.812, p = 0.488$). A Tukey's HSD test revealed that participants who currently had a moderate interest in pandemic films had greater positive resilience during the pandemic than those who had no current interest ($p_{\text{adj}} = 0.008$).

3.6. Morbid curiosity

The Morbid Curiosity Scale demonstrated strong internal reliability ($\alpha = 0.92$). Regression models were conducted for the three main outcomes of interest while controlling for sex, age, income, and TIPI scores. Analyses revealed that morbidly curious individuals experienced significantly greater positive resilience during the pandemic ($b = 0.20, SE = 0.05, t = 3.74, p < 0.001$; Table 3). There was no significant relationship between trait morbid curiosity and psychological distress ($b = -0.06, SE = 0.08, t = -0.70, p = 0.483$) or between trait morbid curiosity and preparedness ($b = 0.02, SE = 0.08, t = 0.20, p = 0.841$).

Controlling for sex, age, income, and TIPI scores, ANCOVA results indicated that morbid curiosity was significantly associated with past use of pandemic films ($F(3, 298) = 3.32, p = .020$). Tukey's HSD revealed that those who had seen many pandemic films were significantly more morbidly curious than those who had never seen pandemic films ($p_{\text{adj}} = 0.014$). Current interest in pandemic films was also significantly associated with trait morbid curiosity ($F(3, 298) = 8.92, p < .001$). Tukey's HSD indicated that those who were currently very interested in pandemic films were significantly more morbidly curious than those who currently had no interest ($p_{\text{adj}} < 0.001$) or a slight interest ($p_{\text{adj}} = 0.033$) in pandemic films. Additionally, those who were currently moderately interested in pandemic films were more morbidly curious than those who had no current interest in pandemic films ($p_{\text{adj}} < 0.001$).

4. Discussion

What can we learn from a scary movie? Although most people go into a scary movie with the intention of being entertained rather than learning something, scary stories present ample learning opportunities. Fiction allows the audience to explore an imagined version of the world at very little cost. Through fiction, people can learn how to escape

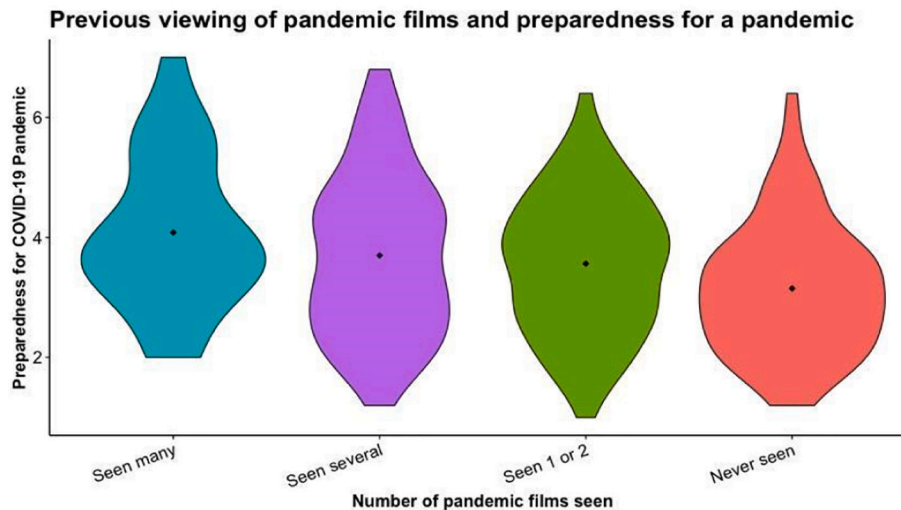


Fig. 1. Pandemic film use and preparedness for COVID-19 pandemic.

dangerous predators, navigate novel social situations, and practice their mind-reading and emotion regulation skills. In this study, we show that people who engaged more frequently with frightening fictional phenomena, such as horror fans and the morbidly curious, displayed more robust psychological resilience during the COVID-19 pandemic. Moreover, watching films that deal with the social upheaval that might occur during a pandemic was associated with greater reported preparedness for the COVID-19 pandemic.

One reason that horror use may correlate with less psychological distress is that horror fiction allows its audience to practice grappling with negative emotions in a safe setting. Through fearing the murderer or monster on the screen, audiences have an opportunity to practice emotion regulation skills. Experiencing negative emotions in a safe setting, such as during a horror film, might help individuals hone strategies for dealing with fear and more calmly deal with fear-eliciting situations in real life (Gross, 1998; Shurick et al., 2012).

Our design does not rule out the possibility that another trait (or set of traits) is influencing both horror fandom and psychological distress. For example, sensation-seeking is tied to a desire for greater arousal and associated with enjoyment of horror media (though the latter relationship is somewhat inconsistent. For review, see Martin, 2019). However, it is unclear how sensation seeking would lead to increased positive resilience or preparedness for a pandemic. Moreover, the models used in our study do control for several individual differences, including general enjoyment of films and TV shows, sex, age, extraversion, conscientiousness, emotional stability, agreeableness, and openness.

Interestingly, morbid curiosity and horror fandom predicted divergent types of psychological resilience. While horror fandom predicted less psychological distress, morbidly curious individuals experienced greater positive resilience. A history of watching horror films may help build emotion regulation skills that can be utilized to ameliorate the psychological distress that accompanies dysphoric events, but it might not offer strategies for enjoying life in the midst of negative experiences. Instead of psychological buffering, morbid curiosity seems to promote positive resilience — i.e., positive experiences in the face of threatening stimuli. Presumably, this occurs through a psychological shift in the cost-benefit ratio of approaching a potentially dangerous stimulus. The morbidly curious individual may not see the pandemic as a terrible negative event (or at least not *only* as that). Instead, the morbidly curious individual may see the pandemic as an opportunity of sorts.

An analogy might be made in a hypothetical situation where two people stumble upon a dead body. The first person, who is *not* morbidly

curious, may look upon the body in horror and immediately shift their attention elsewhere. The second person, a morbidly curious individual, would instead look upon the body with amazement, their eyes glued to the corpse and their cognitive resources fully allocated to inspecting the body. Likewise, the morbidly curious individual may find ways to have positive experiences during the pandemic because the pandemic is perceived as interesting. If the pandemic was perceived as less of a threat due to morbid curiosity, then it might be expected that morbidly curious individuals would experience less psychological distress. The lack of a relationship between these two variables suggests that morbid curiosity may lead to an increase in the perceived benefit of exploring a dangerous phenomenon rather than a decrease in the perceived threat of the phenomenon.

Although our study does show that horror and prepper genre fans display better psychological resilience in the face of the pandemic, it is still a correlational study. While we control for several individual differences in our models to try to target the effect of horror or prepper genre fandom, further research is needed to determine the exact nature of the causality. It is unclear that simply watching more horror or prepper genre films would increase psychological resilience across the board. It may also be the case that, for some individuals, watching more pandemic-themed movies could actually increase anxiety and psychological distress. The possible mechanisms underlying benefits (or detriments) of frightening entertainment on psychological resilience is a promising avenue for future research.

5. Conclusions

While the COVID-19 pandemic has affected nearly everyone in one way or another, certain people seem to be handling the psychological effects better than others. We tested the idea that experience with particular kinds of fiction, namely, horror and pandemic fiction, would be associated with better preparedness for and psychological resilience during the COVID-19 pandemic. Our findings support the idea that fiction can be a useful simulation of both specific scenarios — in the case of pandemic films — and generally fearful scenarios — in the case of horror films. Experience with these simulations may benefit the user through preparation and practice of both specific skills relevant to particular situations and more general skills associated with emotion regulation. We also found that morbid curiosity, a personality trait that has been previously associated with interest in horror (Scrivner, in press), was associated with greater positive resilience during the COVID-19 pandemic. Importantly, these effects were significant even when controlling for age, sex, income, and general factors of

personality. In sum, the current study provides evidence that individual differences in both media preferences and personality are associated with resilience during the COVID-19 pandemic.

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CRediT authorship contribution statement

Coltan Scrivner: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Visualization, Writing - original draft, Writing - review & editing. **John A. Johnson:** Conceptualization, Methodology, Writing - review & editing. **Jens Kjeldgaard-Christiansen:** Conceptualization, Writing - review & editing. **Mathias Clasen:** Conceptualization, Funding acquisition, Writing - review & editing.

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