The Psychological Benefits of Scary Play in Three Types of Horror Fans

Coltan Scrivner\textsuperscript{1,2}  
Marc Malmdorf Andersen\textsuperscript{3,4}  
Uffe Schjoedt\textsuperscript{3,4}  
Mathias Clasen\textsuperscript{3,5}  

1. Department of Comparative Human Development, The University of Chicago  
2. Institute for Mind and Biology, The University of Chicago  
3. Interacting Minds Centre, Aarhus University  
4. School of Culture and Society, Aarhus University  
5. School of Communication and Culture, Aarhus University  

Address correspondence to Coltan Scrivner, Biopsychological Science Building, 940 E. 57th Street, Chicago, IL 60637. Email: cscrivner@uchicago.edu

Abstract  
Why do people seek out frightening leisure activities such as horror films and haunted attractions, and does the experience benefit them in any way? In this article, we address these questions through two separate studies. In Study 1, we asked American horror fans (n = 256) why they like horror and identified three overall types of horror fans which we term “Adrenaline Junkies,” “White Knucklers,” and “Dark Copers.” In Study 2, we collected data from Danish visitors at a haunted house attraction (n = 258) and replicated the findings from Study 1 by identifying the same three types of horror fans. Furthermore, we show that these three types of horror fans report distinct benefits from horror experiences. Adrenaline Junkies reported immediate enjoyment, White Knucklers reported personal growth, and Dark Copers reported both. These results suggest that frightening leisure activities are not just an outlet for Adrenaline Junkies and sensation-seekers, but that the allure of horror has as much to do with its potential as a stimulus for personal growth as it has with enjoyment.

Keywords: Horror, Scale, Sensation-Seeking, Thrill-Seeking, Fear, Play
1. Introduction

Popular culture abounds with frightening elements. Each season sees a crop of new horror movies, streaming services offer a wealth of scary shows, and video game developers churn out ever more frightening games. In addition, each Halloween, haunted attractions draw hundreds of thousands of guests eager for a good scare. Presumably, some people are peer-pressured into attending horror movies and haunted attractions. But according to one recent survey study, more than half of the population claims to enjoy horror media (Clasen et al., 2020). Evidently, many people enjoy being frightened in a recreational context. But why do people seek out playful experiences that evoke fear, anxiety, and dread? This conundrum, which has been dubbed “the paradox of horror,” has long puzzled scholars and scientists. Historically, scholars have speculated that horror offers an opportunity for confronting one’s repressed desires (Dumas, 2014), for engaging in social displays of normative behavior (Zillman & Weaver, 1996), for engaging in benign masochism (Rozin et al., 2013), or for satisfying a curiosity about category-violating monsters and suspenseful plots (Carroll, 1990). However, more recent research suggests that horror may be a form of play (Andersen et al., 2020).

1.1. Play and the Threat Simulation Account of Horror

An increasingly popular account of the paradox of horror, the threat simulation account, suggests that such entertainment may satisfy an evolved propensity for engagement with threat scenarios in a safe context (Clasen, 2017; Clasen et al., 2020; Grodal, 2009). Similarly, some researchers have argued that humans possess a morbid curiosity for many of the themes that are central to horror fiction, such as body disgust, the paranormal, violence, and minds of dangerous people (Oosterwijk, 2017; Scrivner, 2021b). Like risky or thrilling play (Sandseter & Kennair, 2011), engaging in recreational fear may be a useful way to learn how to respond to dangerous phenomena (Miller et al. forthcoming; Morin et al., 2019; Scrivner, 2021a). For instance, horror fiction offers an opportunity to practice emotion regulation strategies that could be useful for related situations in the real world (Scrivner & Christensen, 2021). In support of this idea, one study found that horror fans appeared to have greater psychological resilience during the early months of the COVID-19 pandemic than non-horror fans (Scrivner et al., 2021). Thus, engaging with horror can be understood as a form of scary play that serves an important function of threat simulation (Andersen et al., 2020; Clasen, 2017; Kerr et al., 2019; Marks & Nesse, 1994).
1.2. Individual Differences in Horror Engagement

Although the threat simulation hypothesis may provide an adequate explanation for the broad, apparently paradoxical appeal of horror, it has little to say about the individual differences in enjoyment and consumption.

The most influential account of individual differences in horror engagement suggests that frightening entertainment such as horror movies and haunted attractions appeal especially to people high in sensation-seeking, so-called Adrenaline Junkies. According to Zuckerman (1994), sensation-seekers strive for complex, novel, and intense experiences. Trait sensation-seeking has been shown to predict both horror enjoyment (Cantor and Sparks, 1984; Edwards, 1984; Tamborini & Stiff, 1987) and frequency of horror film attendance (Zuckerman & Litle, 1986). Consequently, much frightening entertainment is marketed to individuals looking for a highly arousing experience.

Evidently, however, not everyone who consumes horror is a sensation-seeker. Even within extreme horror such as that found in haunted attractions, a sizable portion of attendees are not traditional Adrenaline Junkies (Clasen et al., 2019). In fact, some haunted attraction visitors even opt to minimize their fear during the experience through the use of cognitive and behavioral regulation techniques. These fear-minimizing horror fans, or “White Knucklers,” are characterized by their experience of negative psychological side effects from horror such as nightmares, stress, and lingering fear (Robinson et al., 2014). Despite this, they still attend horror movies and brave their way through haunted attractions. Why would these people choose to engage with horror media? Anecdotal evidence suggests that some people benefit epistemically from horror experiences, learning something about themselves as a consequence of experiencing great fear and anxiety in safe settings (e.g., Flanagan, 2020). In other words, for White Knucklers, the epistemic benefits of recreational horror might help to offset the transient negative side effects of scary entertainment.

1.4. The Current Study

Across two studies we created a horror fan typology and investigated the perceived psychological benefits of engaging with horror entertainment for each fan type. In Study 1, we created a typology of horror fandom based on the reasons why American participants engage with horror. Factor analysis showed that horror fandom can be split into three distinct dimensions: Adrenaline Junkies, White Knucklers, and Dark Copers. In Study 2, we tested this typology in the field using a different population and a more extreme form of recreational horror. We collected data from Danish visitors at a haunted house attraction and replicated the findings from Study 1, finding the same three categories of horror fans. Finally, we investigated visitors’ perceived benefits of the horror experience for each fan type.
Study 1

2. Method

All procedures for Study 1 were approved by the Social Sciences Institutional Review Board at The University of Chicago and all methods were carried out in accordance with the relevant guidelines and regulations.

2.1 Participants

US Adults (n = 405) were recruited via Prolific for a study on personality and media preferences. After removing 16 participants who failed attention checks, a total sample of 389 remained.

2.2 Measures

Participants reported their age, sex, and the extent to which they agreed with the statement, “I enjoy watching horror movies and TV shows.” Next, participants rated how much they agreed with 46 statements that focused on why people like horror movies (Supplementary Table 1). Most of these statements came from the results of a study by Robinson et al. (2014), who sourced them from a mix of horror-related academic articles, magazines, newspapers, blogs, fan pages, chat rooms, and online comments sections. One additional exploratory statement was also included. The statements that participants saw were about why people like horror, and our research interest was what horror fans get out of horror. Thus, we restricted our analysis to participants who liked horror, indicated by agreement (selecting 4 or higher on the 7-point scale) with the statement, “I enjoy watching horror movies and TV shows” (n = 256).

3. Results

3.1 Exploratory factor analysis

Exploratory factor analysis (EFA) was conducted on the sample of horror fans using the psych package in R (Revelle, 2017). Six outliers were detected and removed from further analysis using Mahalanobis distance ($X^2(46) = 81.40$), leaving a total sample of 250 participants for EFA. A Kaiser-Meyer-Olkin (KMO) test indicated that the data were suitable for EFA (MSA = 0.88) and Bartlett’s test demonstrated correlation adequacy ($X^2(1035) = 5063.77, p < .001$). Visual inspection of the scree plot and parallel analysis both suggested a three-factor structure. Items
with communalities below 0.20 (n = 8) were removed before assessing item loadings. Items that loaded onto more than one factor were removed in a stepwise fashion, beginning with Items that loaded on all 3 factors. Items with the highest cross-loadings were removed first until all items remaining loaded onto a single factor (cutoff = 0.40).

At this point, 30 items remained. To further reduce item number and increase robustness of the scale, items that were redundant, had high cross-loadings, or low communalities were removed from Factors 1 and 2. The result was an 18-item scale with six items per factor.

Table 1

<table>
<thead>
<tr>
<th>Statement</th>
<th>Adrenaline Junkie</th>
<th>White Knuckler</th>
<th>Dark Coper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Even though I know horror movies are not real, I still get really scared</td>
<td>0.22</td>
<td>0.64</td>
<td>-0.18</td>
</tr>
<tr>
<td>while watching them.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I hate the feeling when I'm watching a horror movie and I know something</td>
<td>-0.23</td>
<td>0.52</td>
<td>0.08</td>
</tr>
<tr>
<td>bad is about to happen.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can feel myself becoming physically stressed while watching a horror</td>
<td>0.08</td>
<td>0.66</td>
<td>-0.22</td>
</tr>
<tr>
<td>movie.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I've gotten so scared during a horror movie that I was afraid to go home</td>
<td>0.02</td>
<td>0.72</td>
<td>0.05</td>
</tr>
<tr>
<td>or walk in my house afterwards.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have nightmares after watching horror movies.</td>
<td>-0.15</td>
<td>0.73</td>
<td>0.12</td>
</tr>
<tr>
<td>The effects of horror movies linger with me for months or even years.</td>
<td>-0.06</td>
<td>0.59</td>
<td>0.19</td>
</tr>
<tr>
<td>I like the sensations that watching horror movies give me.</td>
<td>0.68</td>
<td>-0.14</td>
<td>0.19</td>
</tr>
<tr>
<td>I like horror movies because they are suspenseful.</td>
<td>0.68</td>
<td>-0.10</td>
<td>-0.08</td>
</tr>
<tr>
<td>I go to horror movies because I love the feeling of being scared.</td>
<td>0.69</td>
<td>0.16</td>
<td>-0.06</td>
</tr>
<tr>
<td>I like that feeling of not knowing what's going to happen next in a horror movie.</td>
<td>0.64</td>
<td>-0.19</td>
<td>-0.07</td>
</tr>
<tr>
<td>I love the adrenaline rush I get from watching horror movies.</td>
<td>0.76</td>
<td>0.04</td>
<td>0.07</td>
</tr>
<tr>
<td>Being scared makes me feel alive.</td>
<td>0.62</td>
<td>0.16</td>
<td>0.22</td>
</tr>
</tbody>
</table>
I like to watch "torture films" because I am curious what torture would really be like.

Watching horror movies is a sort of coping mechanism for me.

Horror movies remind me of how violent the world is today.

The more blood and gore there is in a horror movie the better.

I like to prove to my friends that I'm not afraid to go to horror movies.

Watching horror movies makes me realize that everything in my own life is OK.

<table>
<thead>
<tr>
<th></th>
<th>Cronbach's alpha</th>
<th>Inter-item Correlation (M)</th>
<th>Percent of explained variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's alpha</td>
<td>0.83</td>
<td>0.47</td>
<td>28%</td>
</tr>
<tr>
<td>Inter-item Correlation (M)</td>
<td>0.81</td>
<td>0.41</td>
<td>34%</td>
</tr>
<tr>
<td>Percent of explained variance</td>
<td>0.76</td>
<td>0.34</td>
<td>28%</td>
</tr>
</tbody>
</table>

Note. Item loadings above .40 are bolded.

The first factor consisted of items similar to those in the “White Knuckler” factor from Robinson et al. These items center around the negative psychological effects that stem from watching horror movies, such as nightmares, feeling stressed, and feeling afraid after watching a horror film (Table 1). The second factor consisted of items similar to those in the “Adrenaline Junkie” factor from Robinson et al. Items in this factor touched on enjoying suspense, fear, and feeling alive during horror movies. The third factor, however, did not align with the “detective” factor from Robinson et al. Instead, items in factor 3 centered around the extreme nature of horror films and how this related to the individual’s personal life. In particular, these items appeared to reflect the use of dark parts of horror as a way to cope with the real world. As such, we refer to this factor as the “Dark Coper” factor. Each factor demonstrated good reliability (Cronbach’s $a_{WK} = .83$, Cronbach’s $a_{AJ} = .81$, Cronbach’s $a_{DC} = .76$).

**Study 2**

To further investigate what people get from horror, we decided to recruit visitors at a haunted attraction. The methodology in the present study was carried out in accordance with all relevant guidelines and regulations issued by the National Committee on Health Research Ethics, Copenhagen, Denmark, and the study was approved by Aarhus University’s IRB.
(approval #2020-55). Informed consent was obtained from all participants prior to their participation.

2. Method

2.1 Participants

Adult visitors (n = 281; 157 female) were recruited prior to entering the haunted attraction. Of the 281 participants, 258 completed both the pre-haunt and post-haunt questionnaires and were included in the factor analysis. Because participant sex was used in regression analyses, four participants were removed from regression analyses for reporting something other than male or female. Thirteen participants dropped out of the haunt and were not included in correlation or regression analyses, leaving 241 participants for those analyses.

2.2 Procedure

The haunted attraction used for the study is a Danish commercial attraction, Dystopia Haunted House. Visitors pay to walk (or sometimes run) through dozens of interconnected rooms in groups of two to three. The experience is billed as an immersive, live-action theatrical production. The entire experience lasted about one hour per group. Participants completed a pre-haunt questionnaire while waiting in line to enter and a post-haunt questionnaire after exiting the haunt. Participants were identified by a number worn on their chest. When completing the post-haunt questionnaire, participants could enter an email address if they wanted to be entered into a drawing to win 500 Danish krone (~ $81 USD). All questionnaires were presented in Danish.

2.3 Measures

In the pre-haunt questionnaire participants were asked to record their participant number, age, and sex. In the post-haunt questionnaire, participants first reported their participation number and whether or not they dropped out of the haunt. If they did not drop out of the haunt, they reported how much they agreed or disagreed (1 – strongly disagree, 7 – strongly agree) with three statements about their experience inside the haunt: 1) The experiences inside the haunt have made me feel good right now, 2) The experiences inside the haunt have taught me new things about myself, and 3) The experiences inside the haunt have helped me develop at a personal level. If participants reported that they learned something about themselves or developed on a personal level, they were asked to explain their answer. Participants then
completed the horror typology questionnaire. An additional item that we expected to load onto the Dark Coper factor (“Watching horror movies helps me control feelings of anxiety or depression”) was included for exploratory purposes. Finally, participants entered their email address if they wanted to be included in the 500 krone drawing.

3. Results

3.1 Exploratory Factor Analysis on Horror Typology Questionnaire

Exploratory factor analysis (EFA) was conducted on the sample of horror fans using the psych package in R (Revelle, 2017). Six outliers were detected and removed from further analysis using Mahalanobis distance ($X^2(19) = 43.82$), leaving a total sample of 252 participants for EFA. Bartlett’s test demonstrated correlation adequacy ($X^2(171) = 187.43, p < .001$) and a Kaiser-Meyer-Olkin (KMO) test indicated that the data were suitable for EFA (MSA = 0.86). Visual inspection of the scree plot and parallel analysis both suggested a three-factor structure, consistent with Study 1. All items loaded as expected onto a single factor (0.40 cutoff), including the exploratory Dark Coper item (see Table 2). One Adrenaline Junkie item (“Being scared makes me feel alive”) loaded slightly on Dark Copers (.37). However, this may simply reflect the extreme nature of the haunted house, in which participants who agree with this statement are more likely to attend. Scores on the Adrenaline Junkie factor and the Dark Coper factor were slightly correlated ($r = .34$). Each factor demonstrated good reliability (Cronbach’s $a_{adrenaline} = .89$, Cronbach’s $a_{white} = .83$, Cronbach’s $a_{dark} = .76$).

Table 2
Horror Typology final version with items and factor loadings from Study 2.

<table>
<thead>
<tr>
<th>Item</th>
<th>Statement</th>
<th>Adrenaline Junkie</th>
<th>White Knuckler</th>
<th>Dark Coper</th>
</tr>
</thead>
<tbody>
<tr>
<td>AJ1</td>
<td>I go to horror movies because I love the feeling of being scared.</td>
<td>0.72</td>
<td>0.06</td>
<td>0.06</td>
</tr>
<tr>
<td>AJ2</td>
<td>I love the adrenaline rush I get from watching horror movies.</td>
<td>0.85</td>
<td>0.10</td>
<td>0.05</td>
</tr>
<tr>
<td>AJ3</td>
<td>I like the sensations that watching horror movies give me.</td>
<td>0.81</td>
<td>-0.08</td>
<td>0.07</td>
</tr>
<tr>
<td>AJ4</td>
<td>I like horror movies because they are suspenseful.</td>
<td>0.79</td>
<td>0.02</td>
<td>0.03</td>
</tr>
<tr>
<td>AJ5</td>
<td>Being scared makes me feel alive.</td>
<td>0.42</td>
<td>0.11</td>
<td>0.37</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
<td>Factor Loadings</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
|------|------------------------------------------------------------------------------|-----------------
| AJ6  | I like that feeling of not knowing what’s going to happen next in a horror movie. | 0.78 -0.09 -0.10 |
| WK1  | I have nightmares after watching horror movies. I’ve gotten so scared during a horror movie that I was afraid to go home or walk in my house afterwards. | -0.24 0.65 0.06 |
| WK2  | I can feel myself becoming physically stressed while watching a horror movie. | 0.17 0.79 -0.07 |
| WK3  | The effects of horror movies linger with me for months or even years. | 0.02 0.65 0.09 |
| WK4  | Even though I know horror movies aren’t real I still get really scared while watching them. | -0.19 0.57 0.21 |
| WK5  | I hate the feeling when I’m watching a horror movie and I know something bad is about to happen. | 0.07 0.80 -0.09 |
| WK6  | I like to watch “torture films” because I am curious what torture would really be like. | -0.23 0.45 0.19 |
| DC1  | The more blood and gore there is in a horror movie the better. | 0.12 -0.19 0.49 |
| DC2  | Watching horror movies is a way for me to cope with the real world. | 0.14 -0.25 0.45 |
| DC3  | Horror movies remind me of how violent the world is today. | 0.14 0.13 0.51 |
| DC4  | Watching horror movies makes me realize that everything in my own life is OK. | -0.10 0.12 0.64 |
| DC5  | I like to prove to my friends that I’m not afraid to go to horror movies. | 0.10 0.15 0.45 |
| DC6  | Watching horror movies helps me control feelings of anxiety or depression. | 0.01 -0.08 0.56 |
| DC7  | Cronbach’s alpha                                                              | 0.89 0.83 0.76  |
|      | Inter-item Correlation (M)                                                    | 0.57 0.45 0.31  |
|      | Percent of explained variance                                                 | 41% 32% 27%  |

*Note.* Item loadings above .40 are bolded.

### 3.2 Mood boosts, learning, and developing as a person

We had three main outcome variables for Study 2 that represent three of the possible benefits that recreational horror may provide to consumers. First, some recreational horror users may...
experience a mood boost. Second, some users may feel like they learned something about themselves during the experience. Third, some users may feel as if they developed as a person during the experience. The latter two outcomes are related but could tap into distinct benefits. For example, one may learn something about themselves that is either positive or negative (e.g., I am afraid of horror or I am not afraid of horror). In this case, self-knowledge itself is the benefit. Developing as a person, however, suggests that the person improves some ability (e.g., I learned how to overcome my fears). While we did ask participants to explain their answer if they reported learning about themselves or developing as a person, translation issues and incomplete responses rendered a systematic analysis untenable (see Supplementary Table 2 for responses).

We tested the relationship between each of these outcomes and scores on each factor of the horror typology on participants who completed both questionnaires and did not drop out of the haunt (n = 241; 137 female). Although we had specific predictions about the relationship between the horror typology and the outcome variables, we decided to reduce possible false positives by implementing the Bonferroni correction. Therefore, our alpha for determining significance was $p < 0.017$ ($0.05 / 3$ tests each). From a basic correlation analysis (Table 3), each of our predictions was confirmed. We found that Adrenaline Junkies were more likely to report a mood boost, White Knucklers were more likely to report learning something about themselves and feeling as if they developed as a person, and Dark Copers were more likely to report all three outcomes. Next, we tested each of these correlations in linear models controlling for participant age and sex.

<table>
<thead>
<tr>
<th></th>
<th>Learn</th>
<th>Develop</th>
<th>Mood Boost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adrenaline Junkie</td>
<td>.05</td>
<td>.09</td>
<td>.26***</td>
</tr>
<tr>
<td>White Knuckler</td>
<td>.20**</td>
<td>.23***</td>
<td>-.05</td>
</tr>
<tr>
<td>Dark Coper</td>
<td>.20**</td>
<td>.33***</td>
<td>.25***</td>
</tr>
</tbody>
</table>

*Note. Bold indicates a significant correlation. ** indicates $p < .005$; *** indicates $p < .001$.  

Table 3
Correlation matrix for horror typology and outcome variables.
3.2.1 Feeling good due to your experience in the haunt

We first tested the relationship between scores on the horror typology and participants feeling good due to the experience in the haunt while controlling for participant age and sex. As predicted, those who scored high on the Adrenaline Junkie factor ($b = 0.20, SE = 0.05, t = 4.14, p < .001$) and Dark Coper factor ($b = 0.14, SE = 0.04, t = 3.78, p < .001$) reported a mood boost due to their experience inside the haunt. On the other hand, those who scored high on the White Knuckler factor did not report a mood boost due to their experience inside the haunt ($b = 0.00, SE = 0.05, t = 0.05, p = .957$).

3.2.2 Learning about yourself from your experience in the haunt

Next, we tested the relationship between scores on the horror typology and participants reporting that they learned something about themselves due to the experience in the haunt. Controlling for participant age and sex, we found that those who scored high on the White Knuckler factor ($b = 0.13, SE = 0.05, t = 2.70, p = .008$) and Dark Coper factor ($b = 0.11, SE = 0.04, t = 2.93, p = .004$) reported that they learned something about themselves due to their experience inside the haunt. However, those who scored high on the Adrenaline Junkie factor did not report learning anything about themselves ($b = 0.02, SE = 0.05, t = 0.48, p = .631$).

3.2.3 Developing as a person from your experience in the haunt

Finally, we tested the relationship between scores on the horror typology and participants reporting that they developed as a person due to the experience in the haunt. Results mirrored the learning outcome. Controlling for participant age and sex, we found that those who scored high on the White Knuckler factor ($b = 0.17, SE = 0.05, t = 3.40, p < .001$) and Dark Coper factor ($b = 0.20, SE = 0.04, t = 5.10, p < .001$) reported that they developed as a person due to their experience inside the haunt. On the other hand, those who scored high on the Adrenaline Junkie factor did not report that they developed as a person due to their experience inside the haunt ($b = 0.06, SE = 0.05, t = 1.09, p = .279$).

4. Discussion

Across two samples in the US (self-identified horror fans) and Denmark (visitors at a haunted attraction) respectively, we find that horror fans fall along three dimensions or types:
“Adrenaline Junkies,” “White Knucklers,” and “Dark Copers.” Each of these types is characterized by being drawn to horror for different reasons. Furthermore, they report different benefits from recreational horror in the context of a haunted attraction.

4.1 Adrenaline Junkies
Studies 1 and 2 corroborate the widespread assumption that some horror fans can be characterized as Adrenaline Junkies because they enjoy the intense experience that can come from recreational horror. Previous studies on horror fandom have identified Adrenaline Junkies as one of the primary types of horror fans (Clasen et al., 2019; Robinson et al., 2014). Those who scored high on the Adrenaline Junkie dimension agreed with statements such as “I go to horror movies because I love the feeling of being scared” and “I like the sensations that watching horror movies gives me.”

These results are compatible with several studies on horror fandom reporting a positive, though small, correlation with sensation-seeking (e.g., Clasen et al., 2020; Hoffner & Levine, 2005; Tamborini & Stiff, 1987; Zuckerman & Litle, 1986). Individuals who score high in sensation-seeking experience positive emotions in response to high arousal, including arousal stemming from negative stimulation due to fear (Zaleski, 1984; Zuckerman, 1979). Our results in Study 2 support this account as well. Visitors at the haunted house who scored higher in the Adrenaline Junkie dimension reported feeling good due to their experiences inside the haunt. Like the feel-good rush they experience after skydiving (Dustin et al., 2019), Adrenaline Junkies experience a feel-good rush in the face of dangerous or seemingly dangerous situations.

4.2 White Knucklers
Studies 1 and 2 also found support for the existence of another type of horror fan, the so-called White Knucker. Like Adrenaline Junkies, White Knucklers report feeling afraid during recreational horror; where they differ from Adrenaline Junkies is in how they appraise the sensation. White Knucklers tend to dislike feeling afraid, agreeing with statements such as “I hate the feeling when I’m watching a horror movie and I know something bad is about to happen” and “I have nightmares after watching horror movies.” Though they have been previously identified in studies on horror fandom (Clasen et al., 2019; Robinson et al., 2014), White Knucklers are far less researched than Adrenaline Junkies.

If White Knucklers dislike the sensations associated with feeling afraid, why would they seek out entertainment that is designed to scare? One possibility is that White Knucklers, instead of getting immediate rewards from frightening stimuli, achieve some benefit after a recreational horror experience. Accordingly, we predicted that some horror fans might emphasize benefits that come after a recreational horror experience rather than emphasizing the feelings during recreational horror.
In support of our prediction, visitors at the haunted house who scored high in the White Knuckler dimension reported that they felt they learned something about themselves and developed as a person due to their experience inside the haunt. Unlike Adrenaline Junkies, White Knucklers may not enjoy being attacked by a monster in the moment (Figure 1). However, after the frightening encounter ends, White Knucklers are more likely to find some epistemic value in the experience. By exposing themselves to safe, but fearful, situations, White Knucklers can learn important lessons about how they might respond to other fearful or high-intensity situations.

Figure 1. Responses to a scare caught during a flash. Some visitors were more visibly frightened in response to frightening moments like the one pictured here.

4.3 Dark Copers
Study 1 uncovered a new and surprising third type of horror fan, which we call “Dark Copers.” This type also appeared in the Danish sample in Study 2. Dark Copers are characterized by feeling that horror helps them cope with problems in the world and their lives. Dark Copers agreed with statements such as “horror movies remind me of how violent the world is today” and “watching horror movies helps me control feelings of anxiety or depression.”
Interestingly, Dark Copers appear to both get immediate benefits like the Adrenaline Junkies and benefits after the horror experience like the White Knucklers. In other words, scoring high in the Dark Coper dimension was positively correlated with all three outcome variables in Study 2; being more of a Dark Coper was positively associated with feeling good due to the intense experience in the haunt, feeling like you learned something about yourself, and feeling like you developed as a person. In other words, this uncharted type of horror fan may have the most to benefit from recreational horror.

There is still much to be discovered about this third dimension of horror fandom. It is possible, for instance, that the self-reflection that occurs after recreational horror is different in Dark Copers and White Knucklers. Whereas White Knucklers may learn the limits of their fears, the prototypical Dark Coper seems to approach recreational horror in a way that displays both excitement and existential coping. Dark Copers may also be a group that is of interest to clinical psychologists. Anecdotal evidence suggests that some individuals may find solace from their anxiety and depression through using horror entertainment (e.g., Grisafi 2016; Turner 2017), which aligns well with items on the Dark Coper scale. Correspondingly, Scrivner and Christensen (2021) have argued that horror possesses particular cognitive attractors for individuals with elevated anxiety and may hold therapeutic value in the form of increased emotion regulation and generalized psychological resilience (see also Sandseter & Kennair, 2011; Scrivner et al., 2021).

4.4 Unfolding the Paradox of Horror, Limitations and Future Directions

It would seem that engaging with simulated threats may confer different benefits to different people. For some, engaging with horror media confers enjoyment, whereas for others the main benefit for engaging with recreational horror relates to learning or self-development. One way to think about the distribution of perceived psychological benefits is on a scale of short-term to long-term. Adrenaline Junkies receive short-term benefits from recreational horror — they enjoy the extreme sensations in the moment. White Knucklers, in contrast, may benefit on a longer-term scale. By pushing their boundaries, they may learn something about themselves (intermediate) and experience a sort of personal growth (long-term). Finally, Dark Copers appear to have the most to benefit. They relish in the scares in the moment like Adrenaline Junkies, but also reflect on the experience and feel as if they have gleaned personal insight and experienced personal growth like the White Knucklers.

While previous studies have documented some of the reasons why certain horror fans get enjoyment from frightening entertainment (e.g., Andersen et al., 2020; Andrade & Cohen, 2007; Tamborini & Weaver, 1996), the benefits from horror in terms of learning something about oneself and attaining personal growth are still underspecified. It is possible that White
Knucklers and Dark Copers differ in terms of what they learn about themselves and what they gain in personal growth. Our quantitative results tell us little about what it is that White Knucklers and Dark Copers specifically feel they learn about themselves and how they feel that they benefit in terms of personal growth. However, qualitative data collected for Study 2 gives a few indications.

For example, one participant who reported learning about themselves explained: “[I was surprised by how scared I actually got. So maybe I’ve learned that I can’t be completely certain about what my fears are before I’m in the situation.” Another participant said that they learned that “I’m good at handling stressful situations and act[ing] rationally.” While this qualitative data suggests varying outcomes between and within the different types of fandom, the qualitative data collected for the purpose of this study was too incomplete to render a systematic analysis. Future studies may thus benefit from attempting to systematically investigate the possible differences in the types of things some horror fans learn about themselves when engaging with horror and the ways in which they feel that they grow as a person.

4.5. Conclusion

Past research on individual differences in horror entertainment has focused heavily on people with high sensation-seeking as an explanation for horror’s popularity. However, our studies reveal three distinct types of horror fans: Adrenaline Junkies, White Knucklers, and Dark Copers. These three types of horror fans enjoy horror for specific reasons and report distinct benefits after engaging with recreational horror. Similar to the distinct benefits of fitness - some people do it for the workout, others for the long-term benefits - we find that Adrenaline Junkies use recreational horror for immediate enjoyment, while White Knucklers feel they learn and develop from the experience. We also find a third category, the Dark Coper, who appears to derive both immediate enjoyment and personal learning and development. In a way, Dark Copers may represent a kind of super consumer; an athlete of recreational horror who derives immediate pleasure from the workout and reaps the long-term benefits of training.

Acknowledgments

We would like to thank our research assistants for their help with data collection for Study 2: Emilie Larsen Bro, Simon Bysted, Nilab Gholam, Majbritt Grønbæk, Anna Sofie Hauge Jacobsen, Sarah Klainberger, Jonas Bilgrav Mathiasen, Pernille Lærke Munk-Hansen, Mathilde Randlev Møller, Mads Jessen Pedersen, Emma Hove Petersen, Valborg Silberg, Signe Simonsen, Mihaela Taranu, Emma Elisabeth Thomsen, and Jannik Wiggers. We would also like to thank Marie
Søndergaard and Katrine Dahl Sørensen, interns at the Recreational Fear Lab, for invaluable help with managing the data collection for Study 2, and Dystopia Entertainment for making their haunted attraction available to us. Finally, we would like to thank the Independent Research Fund Denmark for funding this research (Mathias Clasen’s grant no. 0132-00204B).

References


