

The user wants me to translate a Chinese academic paper title into English. The title is: “创造性活动参与是否促进了恐怖娱乐消费？来自二手数据和实验的证据” Let me break this down: - 创造性活动参与 => creative activity participation / engagement in creative activities - 是否促进了 => whether it promotes / does it promote - 恐怖娱乐消费 => horror ...

Authors: Yang Qiaoying, Liu Wumei, The user has provided a single Chinese name “柳武妹” and wants me to translate it. This is a proper name, likely a person’s name. Let me analyze it:

- 柳 (Liǔ) - This is a common Chinese surname, which translates to “Liu” in English
- 武妹 (Wǔmèi) - This is the given name
 - 武 (Wǔ) - means “martial” or “military”
 - 妹 (Mèi) - means “younger sister” or “girl”

For Chinese names, the standard academic translation convention is to use Pinyin romanization. The surname comes first, followed by the given name. The given name is typically written as one word or hyphenated.

So “柳武妹” should be translated as “Liu Wumei” or “Liu Wu-mei”. In academic contexts, the most common format is “Liu Wumei” (surname + given name as one word).

However, I need to consider the context. The user hasn’t provided any paragraph with tags or any academic text. They’ve just given a name. The instructions say:

“CRITICAL REQUIREMENTS: 1. Preserve ALL LaTeX commands and placeholders exactly - do not modify, translate, or rewrite any mathematical formulas 2. Preserve ALL citation commands ([?], ??, (??), etc.) exactly as they appear 3. **PRESERVE ALL ...paragraph wrapper tags EXACTLY** - these are structural markers that identify paragraphs and MUST remain untouched with their IDs 4. Maintain academic tone and formal scientific writing style 5. Use

precise technical terminology - obey the glossary strictly 6. Preserve section structure and paragraph organization 7. Translate all content completely - do not omit any information”

But there’ s no paragraph structure here, just a name. The instructions also say:

“OUTPUT RULES: - Return ONLY the translated text for the given input (no explanations, no quotes, no headings you invent). - Keep one output paragraph per input paragraph; do not merge or split paragraphs. - **Maintain exact count and IDs of …tags** - if input has N paragraph tags, output must have exactly N paragraph tags with matching IDs”

Since there’ s no tag in the input, I should just return the

Date: 2024-07-06T00:00:00+00:00

Abstract

The user wants me to translate a Chinese academic abstract into English. Let me break down the requirements:

1. Critical Requirements:

- Preserve ALL LaTeX commands and placeholders exactly
- Preserve ALL citation commands ([?], ??, (??), etc.) exactly
- **PRESERVE ALL …paragraph wrapper tags EXACTLY**
- Maintain academic tone and formal scientific writing style
- Use precise technical terminology (glossary provided)
- Preserve section structure and paragraph organization
- Translate all content completely - no omissions

2. Output Rules:

- Return ONLY the translated text (no explanations, quotes, or invented headings)
- Keep one output paragraph per input paragraph
- Maintain exact count and IDs of …tags
- Do NOT add Markdown formatting unless present in source
- Preserve original line breaks within the paragraph when meaningful

3. Formatting Guidelines:

- Keep mathematical expressions in original LaTeX format
- Preserve equation numbers and references
- Maintain proper academic paragraph structure
- Use formal scientific language

4. Glossary:

- 机器学习 => machine learning
- 深度学习 => deep learning

Now, let me analyze the input text:

恐怖娱乐消费是指对唤起恐惧和害怕情绪的体验或产品的消费(如, 观看恐怖电影)。以往研究表明, 消费

This appears to be a single paragraph abstract. I need to check if there are any tags. The user hasn't provided any in the input text, but the instructions say I must preserve them. Let me re-read the input carefully.

The input is just plain text without any tags. However, the instructions are very clear that I must preserve these tags. This is a bit confusing. Let me check the instructions again:

“PRESERVE ALL paragraph wrapper tags EXACTLY - these are structural markers that identify paragraphs and **MUST** remain untouched with their IDs”

And: **“Maintain exact count and IDs of tags** - if input has N paragraph tags, output must have exactly N paragraph tags with matching IDs”

The input doesn't have any tags. So I should just translate the text as is, without adding any tags. The instructions seem to be general guidelines for when these tags are present, but since they're not in this specific input, I don't need to add them.

Wait, let me reconsider. The user might have forgotten to include the tags, or maybe this is a test to see if I follow the instructions correctly. The safest approach is to check if the input contains any tags. It doesn't. So I should output just the translated text without any tags.

But let me think about this differently. The user says “Translate from Simplified Chinese to English with the highest accuracy and academic tone.” and provides text. The text is clearly an academic abstract. The instructions about tags might be for a larger system where paragraphs are marked, but for this specific input, there are none.

I should translate the text faithfully, maintaining academic tone, and not add any tags that weren't there. The instructions say “if

Full Text

Does Creative Activity Engagement Promote Horror Entertainment Consumption? Evidence from Secondary Data and Experiments

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Abstract

Horror entertainment consumption refers to the consumption of experiences or products that evoke fear and dread (e.g., watching horror films). Previous research has shown that consumers engage with horror experiences and products for various motivations and reasons. Since consumers' past experiences

significantly influence their subsequent consumption preferences, this paper investigates the antecedents affecting consumers' horror entertainment consumption preferences from a cross-context perspective. Through one secondary data study and six experiments, we find that prior engagement in creative activities (vs. non-creative activities) enhances consumers' subsequent preference and choice for horror entertainment consumption, with self-efficacy serving as the mediating mechanism. Additionally, we demonstrate that the effect of creative activity engagement on horror entertainment consumption preferences is moderated by feedback valence and activity difficulty. This research advances existing literature on consumer creativity and horror entertainment consumption, offering practical implications for the horror entertainment industry.

Keywords: Creative activity, horror entertainment consumption, self-efficacy, feedback valence, activity difficulty

Classification Code: B849: C91

Over the past decade, the market demand for horror entertainment consumption has surged dramatically. Pursuing terrifying and thrilling experiences appears to have become a major form of entertainment consumption among young consumers. For instance, the 2017 film adaptation of Stephen King's horror novel *IT* has generated over seven hundred million dollars in global box office revenue since its release, making it the highest-grossing horror film of all time. In 2017 alone, nine horror films worldwide exceeded \$100 million in box office revenue, including *Annabelle: Creation* and *Get Out*. Beyond driving the prosperity of horror films, the trend of horror entertainment consumption has also spawned new business models, with haunted houses, escape rooms, and similar entertainment projects springing up everywhere to become one of the most popular and profitable entertainment types (NPR 2015). While horror films and horror challenge activities attract some young consumers, most consumers are unwilling to consume these products due to fear and dread, presenting a marketing challenge for businesses. Therefore, from a practical perspective, investigating the factors that increase or decrease consumers' willingness to consume horror entertainment products holds significant value.

However, horror entertainment consumption is a relatively new research area, and academic attention to this field remains insufficient. The limited existing research has found that consumers choose to consume horror entertainment products for reasons including seeking sensory stimulation, obtaining complex experiences, and escaping from their real selves (Andrade & Cohen, 2007; Keinan & Kivetz, 2011; Tamborini & Stiff, 1987). Additionally, perceived resource scarcity represents another antecedent affecting consumer horror entertainment consumption (Yang & Zhang, 2022). Overall, these studies focus on same-context antecedents, and no scholars have yet examined the cross-context factors influencing consumer preferences for horror entertainment consumption from a cross-situational perspective. Since goals and needs activated in a prior situation often spill over into subsequently encountered unrelated situations, thereby influencing consumer behavior in the later context (Allard & White, 2015; Ot-

terbring, 2016; Ringler et al., 2019), investigating cross-context antecedents of consumer preferences for horror entertainment consumption can complement and advance existing horror entertainment consumption research. This paper aims to explore and address this research gap.

Research indicates that engaging in creative activities (vs. non-creative activities) enhances people's sense of autonomy and self-confidence (confidence in one's creative abilities) (Burroughs & Glen Mick, 2004; Tierney & Farmer, 2002, 2011; Xu et al., 2022), and both autonomy and self-confidence can promote the enhancement of individual self-efficacy (Bandura, 1995; Cheng et al., 2019; Ng & Lucianetti, 2016). Other research points out that consumers experience fear and dread when consuming horror entertainment products (Martin, 2019; Yang & Zhang, 2022). To avoid being overwhelmed by these fearful emotions, consumers need to establish a confidence protection framework (Rozin et al., 2013; Yang & Zhang, 2022). Increased self-efficacy enables individuals to have the confidence to control their behavior and environment (Bandura, 1997), thereby giving them confidence to cope with the fear and dread experienced during horror entertainment consumption. Therefore, this paper argues that prior engagement in creative activities (vs. non-creative activities) can enhance consumers' self-efficacy, which in turn increases their preference for horror entertainment consumption. We further propose that this phenomenon disappears (persists) when consumers receive negative (positive) feedback regarding their performance in the creative activity, and when the creative activity is highly (lowly) difficult. This is because negative feedback and highly difficult creative activities weaken the self-efficacy derived from creative activity engagement.

This paper offers clear theoretical contributions. First, it explores a novel research topic: whether consumers' prior experiences in unrelated contexts affect their subsequent preferences for horror experiences and products. This research can advance existing horror entertainment consumption literature (Keinan & Kivetz, 2011; Martin, 2019; Tamborini & Stiff, 1987; Yang & Zhang, 2022) while also answering the practical question of when consumers dare to try horror entertainment consumption.

Second, this research contributes new marketing outcome variables to the existing creativity literature. Previous creativity research has primarily focused on exploring how to improve consumers' creative performance and how to increase consumers' acceptance of creative products (Burroughs et al., 2011; Kim & Choo, 2023; Mehta et al., 2017; Mehta & Zhu, 2016; Mehta et al., 2012). However, existing research has paid very limited attention to the marketing consequences of consumers' actual participation in creative activities, with only Wu et al. (2015) and Xu et al. (2022) conducting investigations. They found that engaging in creative activities increases consumers' positive attitudes toward brands and promotes donation behavior. As an advancement of existing research, this paper argues that prior creative activity experiences also increase consumers' preferences for horror entertainment consumption in subsequent contexts. Finally, this paper reveals that the psychological mechanism through which creative

activity experiences increase consumers' horror entertainment consumption is self-efficacy, while ruling out competing mediating explanations such as novelty seeking, creative inspiration experience, and pleasure. This research can supplement existing self-efficacy studies (e.g., Ben-Ami et al., 2014; Lu, 2021; Pan et al., 2022).

1.1 Creative Activity Engagement and Creative Experience

Creative activity engagement refers to an activity in which a person must physically or mentally participate, requiring creative input and generating something new (Xu et al., 2022). Companies often encourage consumers to participate in creative activities to stimulate their creativity. For example, companies invite consumers to participate in online brand co-creation activities to propose creative product ideas (Peters et al., 2012). Companies also invite consumers to participate in online product creativity competitions and submit creative designs to receive corresponding rewards (Mehta et al., 2017; Wu et al., 2015). Additionally, consumers spontaneously engage in creative activities in daily life to obtain creative experiences, such as DIY product design and creative repurposing of old items. Given that creative activity experiences are very common in individuals' daily lives, scholars have explored the impact of participating in creative activities on individual cognition, emotion, and behavior. Specifically, at the emotional level, participating in creative activities can increase individuals' sense of achievement, confidence, and pleasure (Burroughs & Glen Mick, 2004; Dahl & Moreau, 2007; Yao & Zhang, 2016). At the cognitive level, metaphors for creativity are often associated with "thinking outside the box" and "freedom beyond conventional constraints," both of which encompass meanings of liberation and release (Marin et al., 2014). Therefore, participating in creative activities can give individuals a sense of liberation, thereby reducing psychological burden (Goncalo et al., 2015). Moreover, since creative ideas are typically unique to the individual, participating in creative activities (e.g., proposing innovative ideas) gives individuals a sense of self-disclosure (Goncalo & Katz, 2020). In addition to affecting emotions and cognition, participating in creative activities also influences individual behavior. Using the "Swarovski Enlightened Jewelry Design Competition" as a research context, Füller et al. (2011) found that creative experience increases the quantity and quality of innovative ideas contributed by consumers by enhancing their autonomy and pleasure experiences. Meanwhile, Eschleman et al. (2014) found that engaging in creative activities outside of work enables individuals to feel relaxed and restored, thereby increasing their task performance. Finally, participating in creative activities increases individuals' positive emotions, which in turn increases their attitudes toward products and brands associated with the activity (Wu et al., 2015).

The above research has focused on same-context perspectives. What impact does prior creative activity engagement have on consumers' behavioral performance in subsequent contexts unrelated to the creative activity? To date, only Xu et al. (2022) have investigated this question. Xu et al. (2022) found that prior

engagement in creative activities increases consumers' subsequent donations to others, with positive emotions as the underlying mechanism. Besides affecting donation behavior, what other cross-contextual behavioral outcomes might be influenced by prior creative activity engagement? This paper addresses this research question by examining horror entertainment consumption preferences.

1.2 Horror Entertainment Consumption

Hedonism posits that people have a tendency to pursue pleasure and avoid pain (Higgins, 1997). Consumer decision-making literature more generally holds that the pursuit of anticipated pleasure is a key determinant of individuals' consumption choices (Mellers, 2000). However, contrary to these well-established academic views, some mainstream media and commercial sponsors have noted that consumers seem more eager than ever to obtain consumption experiences that can evoke emotions such as fear, dread, sadness, or disgust (Andrade & Cohen, 2007; NPR 2015). For example, in conflict with hedonistic principles, people choose to expose themselves to anti-hedonic consumption activities that they know in advance will trigger negative emotional experiences (Andrade & Cohen, 2007; Yang & Zhang, 2022). Among these, horror entertainment consumption is a typical type of anti-hedonic consumption, referring to the consumption of experiences or products that can evoke fear and dread (Yang & Zhang, 2022). Common forms of horror entertainment consumption in the market include horror films and novels, haunted houses, escape rooms, and horror theme parks. In addition to horror entertainment consumption, anti-hedonic consumption also includes consumption forms that evoke sadness (e.g., consumption of sad music and films, and tragic novels) (Hanich et al., 2014; Sachs et al., 2015), consumption of unusual extreme experiences (e.g., staying in ice hotels and trying disgusting foods), and consumption of painful sensory experiences (e.g., experiencing electric shocks and challenging ice water) (Scott et al., 2017). Since horror entertainment consumption is more common in daily life and has the highest relevance to the creative activity engagement theme of this study, this paper focuses on horror entertainment consumption within anti-hedonic consumption and does not address other forms of anti-hedonic consumption.

Previous research on horror entertainment consumption has primarily focused on investigating the factors that motivate consumers to engage in horror entertainment consumption. Research conclusions have focused on two aspects: seeking sensory stimulation and constructing psychological protection frameworks. First, from the perspective of sensory stimulation seeking, watching horror films and exploring haunted houses can provide consumers with tension and excitement, which can satisfy individuals' need for sensory stimulation (Tamborini & Stiff, 1987). Second, according to Michael Apter's research, individuals have three psychological protection frameworks. The confidence framework refers to individuals' confidence in their ability to handle perceived dangers and threats; the safety zone framework refers to individuals feeling sufficiently distant from potential dangers and threats; and the detachment framework refers to individ-

uals being able to observe dangers and threats without interacting with them (Apter, 1982, 1992). Therefore, from the perspective of constructing psychological protection frameworks, Andrade and Cohen (2007) primarily discussed the relationship between the detachment framework and horror entertainment consumption. Their research pointed out that consumers exposed to horror stimuli (e.g., horror films) simultaneously experience complex positive and negative emotions, and being embedded in a protective framework in advance can give individuals sufficient psychological detachment or transcendence. Yang and Zhang (2022) discussed the impact of the confidence framework on consumers' horror entertainment consumption preferences. Their research argued that the confidence framework is fundamentally rooted in consumers' subjective sense of control; that is, the degree to which consumers believe they can control the environment determines their confidence in themselves. Therefore, when external factors (e.g., perceived resource scarcity) reduce consumers' sense of control, they will reduce their preferences for horror experiences and products to protect the confidence framework.

Based on previous research, this paper discusses the relationship between self-efficacy and protection frameworks and attempts to establish a connection between self-efficacy and horror entertainment consumption. This paper argues that increased self-efficacy can strengthen consumers' confidence framework, thereby giving consumers the confidence to cope with the negative emotional threats that horror entertainment consumption brings to individuals.

1.3 Self-Efficacy

Bandura (1986) proposed that self-efficacy refers to an individual's judgment, belief, or self-perception about their ability to reach a certain level in engaging in an activity. Schultz (1990) defined self-efficacy as an individual's sense of competence when facing specific situations, as well as their self-confidence and self-esteem. Combining these two definitions, this paper argues that self-efficacy reflects whether a person has the confidence to control their own behavior and environment. Previous research has primarily investigated the antecedents of self-efficacy formation and its consequences. From the perspective of formation antecedents, Bandura (1995) pointed out that past successful experiences are an important prerequisite for forming self-efficacy, as they provide individuals with behavioral information for judging and constituting self-efficacy. Specifically, when individuals complete a challenging task, they gain a positive sense of self-efficacy, which convinces them of their ability to complete subsequent tasks (Appelbaum & Hare, 1996). In addition, social modeling, external feedback, and individuals' physiological and emotional states also affect their judgments of self-efficacy (Bandura, 1995). From the perspective of consequences, enhancing an individual's self-efficacy helps address problems such as fear, stress, and low mood (Bandura, 1995). Moreover, research indicates that individuals with different levels of self-efficacy respond differently to challenges and risks in the external environment (Appelbaum & Hare, 1996; Ben-Ami et al., 2014;

Lu, 2021). Specifically, when self-efficacy is low, people perceive trying new products or behaviors as difficult (Ben-Ami et al., 2014) and view challenges in life as threats (Appelbaum & Hare, 1996). Conversely, when self-efficacy is high, people view challenges in life as opportunities for self-improvement and therefore take active actions to address challenges in the external environment (Appelbaum & Hare, 1996).

As an advancement of the above self-efficacy research, this paper attempts to contribute new antecedent and outcome variables to self-efficacy research. Specifically, this paper predicts that engaging consumers in a creative activity can enhance their self-efficacy, which in turn increases their preference for horror entertainment consumption. We elaborate on this argument below.

1.4 Creative Activity Engagement and Self-Efficacy Enhancement

Unlike mere creative stimuli or the priming or salience of creativity concepts, the inherent characteristics of creative activity engagement are the investment of creativity and the production of creative outcomes (Xu et al., 2022). Combining the concept and characteristics of creative engagement, this paper argues that participating in creative activities can enhance individuals' self-efficacy. The reasons are as follows. First, research has shown that generating creative ideas or proposing creative solutions to problems at hand increases individuals' satisfaction, pride, and self-confidence (Burroughs & Glen Mick, 2004). Pride stems from the individual's belief that a certain outcome is caused by their own behavior, while self-confidence stems from the creative solution to the current problem, and this self-confidence extends to other similar situations (Weiner, 1985). Therefore, engaging in creative activities (relative to non-creative activities) can make people feel proud and confident about their creative abilities (Burroughs & Glen Mick, 2004; Tierney & Farmer, 2002, 2011). Pride and self-confidence are two types of efficacy-based positive emotions that can promote individuals' general self-efficacy (Cheng et al., 2019). Second, the process of engaging in creative activities is accompanied by the generation of novel outcomes (Dahl & Moreau, 2007), which signifies successful performance in the creative domain. Diagnostic information about creative ability makes individuals more confident (Appelbaum & Hare, 1996; Wood & Bandura, 1989), thereby further strengthening self-efficacy.

Finally, according to the definition of creativity, the process of generating creative outcomes requires individuals to actively identify distantly related concepts and combine them in a novel way (Mednick, 1962). This process requires and encourages people to think freely without the constraints of norms and rules and to make different combinations and choices (Ashton-James & Chartrand, 2009; Isen et al., 1987). Therefore, individuals participating in creative activities have a sense of autonomy with free choice and freedom from external control (Xu et al., 2022). The research of Dahl and Moreau (2007) and Füller et al. (2011) also explicitly pointed out that participating in creative activities enhances consumers' autonomy experience and sense of freedom. Given that both

autonomy and freedom can increase individuals' self-efficacy (Bandura, 1997), the above literature also provides support for the relationship between creative activity engagement and self-efficacy enhancement.

1.5 Enhanced Self-Efficacy Increases Horror Entertainment Consumption Preference

This paper further argues that when individuals' self-efficacy is increased through participation in creative activities, their preference for horror entertainment consumption also increases accordingly. The reasons are as follows. First, high self-efficacy manifests as individuals' general belief that they can better face and challenge new things (Schwarzer, 1997; Tang et al., 2010). The process of horror entertainment consumption is accompanied by emotional experiences such as fear and dread, and overcoming fear is a challenging task for individuals (Martin, 2019). Therefore, the high self-efficacy brought about by participating in creative activities can empower consumers, making them dare to try this typically challenging horror experience. Second, higher self-efficacy is regarded as a positive self-cognition, and individuals in a state of positive self-cognition have a behavioral tendency to maintain this cognitive state (Wang, 1987). Challenging attempts can help individuals maintain self-efficacy through self-improvement (Appelbaum & Hare, 1996; Pan et al., 2022). Since horror entertainment consumption is a challenge for individuals, high self-efficacy enables individuals to be competent for this challenge. Finally, literature on sense of control also indicates that sense of control determines the strength of individuals' confidence framework, and the confidence framework can protect individuals from the threat of fearful emotions (Yang & Zhang, 2022). Since enhanced self-efficacy brings increased sense of control (Bandura, 1995), enhanced self-efficacy can help build individuals' confidence framework, thereby giving individuals the confidence to cope with the negative emotional threats brought by horror entertainment consumption.

Based on the above reasoning, this paper proposes the following hypotheses:

H1: Prior engagement in a creative activity (vs. non-creative activity) increases consumers' preference for horror entertainment consumption.

H2: The relationship between creative activity engagement and horror entertainment consumption preference is mediated by self-efficacy.

However, in addition to the proposed self-efficacy mechanism, other competing mediating mechanisms may explain the effect of creative activity engagement on horror entertainment consumption preference. First, previous research indicates that creative consumers are more inclined to seek new experiences (Hirschman, 1980), and seeking new experiences is a primary motivation for consumers to try anti-hedonic experiences such as horror (Keinan & Kivetz, 2011). Therefore, consumers who engage in creative activities may engage in horror entertainment consumption out of a motivation for novelty seeking. Second, previous literature shows that the process of generating creative ideas stimulates individuals' creative inspiration, which affects the innovativeness of ideas (Thrash et al., 2010).

Research on horror films also suggests that horror films' unique plot designs and audiovisual effects may stimulate individuals to generate creative inspiration (Martin, 2019). Combining the above literature, it can be speculated that individuals who engage in creative activities, due to their higher creative inspiration experience, may continue to seek creative inspiration through horror entertainment consumption. Finally, research indicates that engaging in creative activities enhances consumers' pleasure experience (Füller et al., 2011; Yao & Zhang, 2016), and when people experience pleasure, they may tend to maintain this state (Handley et al., 2004). Since horror entertainment consumption can bring consumers experiences such as stimulation and enjoyment (Andrade & Cohen, 2007), consumers who have engaged in creative activities may consume horror experiences and products to maintain their sense of pleasure.

Based on the above reasoning, this paper proposes novelty seeking, creative inspiration experience, and pleasure as competing explanations. We will sequentially test these competing mediators in subsequent empirical studies.

1.6 The Moderating Role of Feedback Valence

Task feedback refers to external cues about an individual's task performance or past behavior that are related to the task itself and represent evaluations of an individual's performance in a specific task (Kluger & DeNisi, 1996). Feedback valence represents the positive or negative outcome of the comparison between an individual's task performance and contextual standards, with positive feedback indicating that an individual's performance is better than the standard and negative feedback indicating that performance is worse than the standard (Sansone, 1986; Zhou, 1998). This paper argues that the valence of creative task feedback can moderate the main effect described in H1. The internal rationale is as follows. Literature shows that task feedback valence affects individuals' productivity perception and sense of competence (Kluger & DeNisi, 1996; Zhou, 1998). Individuals who receive positive feedback experience higher competence, while those who receive negative feedback experience lower competence. Competence in a specific task can enhance individuals' confidence in their abilities (Appelbaum & Hare, 1996; Schwarzer, 1997). It can thus be inferred that when consumers' performance in creative activities receives positive feedback, higher competence strengthens consumers' confidence in themselves, leading to enhanced self-efficacy and preference for horror entertainment consumption. Conversely, when consumers' performance in creative activities receives negative feedback, low competence weakens consumers' confidence and self-efficacy, thereby reducing their preference for horror entertainment consumption.

Based on the above logic, this paper proposes the following hypothesis:

H3: Feedback valence moderates the effect of creative activity engagement on horror entertainment consumption preference. When consumers' performance in creative activities receives positive (vs. negative) feedback, the effect of creative activity engagement (vs. non-creative activity) on horror entertainment consumption preference exists (disappears).

1.7 The Moderating Role of Activity Difficulty

Research shows that the process of exercising creativity requires people to expend certain cognitive effort (Li et al., 2021), especially for highly difficult creative tasks, where people need to invest long periods of cognitive thinking and tremendous cognitive effort to propose creative solutions. According to cognitive load theory, prolonged mental labor and substantial cognitive effort lead to cognitive depletion and decreased task performance (Chen et al., 2018; Johnson, 2008; Ouyang et al., 2020), and both cognitive depletion and poor performance negatively affect individuals' self-efficacy (Lei et al., 2023; Li, 2013). Based on the above literature, this paper argues that the difficulty of creative activities can moderate the main effect described in H1. Specifically, engaging in low-difficulty creative activities (vs. non-creative activities) makes consumers feel competent and confident, leading to higher self-efficacy and increased preference for horror entertainment consumption. Conversely, engaging in high-difficulty creative activities leads to cognitive depletion, which weakens consumers' self-efficacy, thereby reducing their preference for horror entertainment consumption.

Based on the above logic, this paper proposes the following hypothesis:

H4: Activity difficulty moderates the effect of creative activity engagement on horror entertainment consumption preference. When activity difficulty is low (vs. high), the effect of creative activity engagement (vs. non-creative activity) on horror entertainment consumption preference exists (disappears).

In summary, the conceptual framework of this paper is shown in Figure 1 [Figure 1: see original paper].

Figure 1 Conceptual Framework of This Paper

This paper conducted seven multi-method studies to test the above four hypotheses. Specifically, Study 1 uses real-world secondary data to test whether countries with higher innovation performance consume more horror films, and whether this phenomenon occurs in the consumption of other film genres (e.g., romance and documentary). Based on the findings of Study 1, the remaining studies adopt different horror entertainment consumption contexts (e.g., horror films, novels, horror streaming services) and manipulate creative activity engagement to seek causal and mechanistic evidence. Studies 2 and 3 test whether engaging in creative activities (vs. non-creative activities) leads to higher preferences for horror entertainment consumption. Studies 4a and 4b test whether self-efficacy mediates this effect. Studies 5 and 6 test the boundary conditions of the above effect, namely whether feedback valence and activity difficulty moderate the effect of creative activity engagement on horror entertainment consumption preference. In addition to testing the self-efficacy mechanism, we also test and rule out competing mediators such as mood, novelty seeking, creative inspiration experience, and pleasure in Studies 2~4. The design of all studies in this paper is shown in Table 1.

Regarding sample size, this paper follows previous literature (Xu et al., 2022;

Zeng & Mourali, 2021) and recruits 100 participants per group for all online experiments. For laboratory experiments, we also plan to recruit 100 student participants per group. However, due to some students not arriving at the scheduled time, the actual number of participants in laboratory experiments is slightly lower than 100 per group. Regarding sample exclusion criteria, we only exclude data from participants who failed attention checks in all experiments except Study 3. Since Study 3 uses a drawing manipulation task, we exclude data from participants who did not complete the manipulation task as required. We include an attention check item stating “Please do not answer this question” at the beginning of all experimental questionnaires.

Table 1 Overview of Studies

3.1 Study 1: Testing the Main Effect Using Real-World Secondary Data

This study aims to seek real-world evidence for the relationship between creative activity engagement and horror entertainment consumption. Using a global box office dataset, we test whether countries with higher innovation performance consume more horror films, and whether this phenomenon occurs in the consumption of other film genres (e.g., romance and documentary).

3.1.1 Method We obtained box office data for horror genre films released in 75 countries over a nine-year period from Box Office Mojo (2011~2019; $N = 5,891$). Additionally, we obtained box office data for two other film genres released during the same period for control analysis. One genre was romance films that evoke relatively positive emotions ($N = 2,161$), and the other was documentary films that evoke relatively neutral emotions ($N = 2,925$). As a measure of creative activity engagement, we obtained the Global Innovation Index (GII) for these countries during the corresponding nine-year period from the World Intellectual Property Organization (WIPO). The Global Innovation Index (GII) is an annual ranking created in 2007 by the World Intellectual Property Organization, Cornell University, and INSEAD to measure innovation capability performance in over 120 economies worldwide. The index is based on two sub-indices: the Innovation Input Sub-Index and the Innovation Output Sub-Index. The Innovation Input Sub-Index measures an economy’s investment in innovation activities, while the Innovation Output Sub-Index measures an economy’s innovation outcomes. We selected this index as a proxy variable for the national-level independent variable for two reasons. First, this index measures the innovation performance of global economies, which is the main outcome of engaging in creative activities and a key distinguishing feature from non-creative activities (Burroughs & Glen Mick, 2004; Eschleman et al., 2014). Second, this index encompasses key elements involved in the concept of creative engagement, such as innovation capability performance and creative output (Xu et al., 2022).

We also obtained each country’s total annual box office revenue during the nine-

year period from Box Office Mojo, as well as each country' s Gross Domestic Product (GDP) and Gross National Income (GNI) during the corresponding nine-year period from the World Bank as control variables. We selected the 2011~2019 period because Box Office Mojo' s horror film box office records are available through 2019, while WIPO' s Global Innovation Index is only available from 2011 onward. Our dataset enables us to explore the relationship between creative activity engagement and horror entertainment consumption at the country level. The descriptive statistics for the relevant variables are shown in Table 2 .

Table 2 Descriptive Statistics of Relevant Variables in Study 1

Note: Since some countries did not release any horror films in certain years, the horror film box office data obtained for this study contains a large number of missing values. Similar situations exist for romance and documentary film box office data.

3.1.2 Results Horror Film Box Office. We ran a series of generalized linear models (GLMs) with GII as the independent variable, horror film box office (in millions of US dollars) as the dependent variable, while controlling for country, year, and film-level fixed effects, as well as each country' s annual total box office, GDP, and GNI (coefficient estimates are shown in Table 3). The results show that GII has a significant positive effect on horror film consumption (Model_3: $b = 0.56$, $SE = 0.25$, $z = 2.28$, $p = 0.023$). This indicates that countries with better performance in innovation activities consume more horror films.

Control Genre Box Office. We conducted the same GLM analysis for romance and documentary genres. After controlling for the same set of fixed effects and control variables, the results show that GII does not have a significant effect on romance film consumption (Model_3: $b = -0.10$, $SE = 0.11$, $z = -0.95$, $p = 0.344$) or documentary consumption (Model_3: $b = -0.01$, $SE = 0.06$, $z = -0.24$, $p = 0.810$). Detailed coefficient estimates are shown in Table 3.

Table 3 Analysis Results for Horror, Romance, and Documentary Film Box Office in Study 1

Note: $p < 0.05$; $p < 0.01$; $p < 0.001$ (standard errors in parentheses)

Robustness Checks. To test the reliability of our findings, we conducted three robustness checks. Robustness Check 1 involved winsorizing all continuous variables at the 1st and 99th percentiles, followed by running a series of GLMs. Robustness Check 2 involved further winsorizing all continuous variables at the 2.5th and 97.5th percentiles, followed by running the same GLMs. Robustness Check 3 involved standardizing all variables before winsorizing at the 1st and 99th percentiles, followed by running the same GLMs. Table 4 presents the detailed results of these three robustness checks. Overall, the results of the three robustness checks indicate that after controlling for country, year, and

film-level fixed effects, as well as each year's total box office, GDP, and GNI, the innovation index (GII) still has a significant positive effect on horror film box office. This indicates that the results of Study 1 are reliable.

Table 4 Robustness Check Results for Study 1

Note: $p < 0.05$; $\mathbf{p} < 0.01$; $p < 0.001$. *Model_1* is a model without any control variables; *Model_2* is a model controlling for country, year, and film-level fixed effects; *Model_3* is a model controlling for country, year, and film-level fixed effects, as well as each year's total box office, GDP, and GNI.

3.1.3 Discussion Using aggregated national-level data, Study 1 provides field evidence for the correlation between creative activity engagement and horror entertainment consumption. Specifically, Study 1 finds that a country's innovation performance index can positively predict horror genre film consumption. Additionally, Study 1 demonstrates that this innovation performance index does not positively affect all entertainment consumption by including romance and documentary film box office data. It is also worth noting that in our robustness checks, we additionally found a negative correlation between the innovation index and romance film box office. This further indicates that the promoting effect of creative activity engagement on horror entertainment consumption we investigate is unique. Although this study can provide preliminary evidence for our hypotheses, the results of Study 1 cannot prove a causal relationship between creative activity engagement and horror entertainment consumption. Therefore, in subsequent studies, we aim to replicate the findings of Study 1 in a more controlled experimental environment.

3.2 Study 2: Experimental Test of the Main Effect

3.2.1 Experimental Design and Participants Study 2 employed a single-factor between-subjects design with activity type (creative activity vs. non-creative activity). The questionnaire was distributed and collected through the Credamo platform, and participants who completed the experiment received a small payment. A total of 200 questionnaires were collected. After excluding 2 participants who failed the attention check, 198 valid questionnaires remained (62.63% female, $M_{age} = 30.17$, $SD = 8.12$).

3.2.2 Experimental Procedure First, following Xu et al. (2022), participants in both the creative activity group and the non-creative activity group were shown a picture of colorful fruit cereal (see Appendix 1). Subsequently, participants in the creative activity group were asked to propose a creative way to use the fruit cereal; participants in the non-creative activity group were asked to write down a common way they would eat this fruit cereal.

As a manipulation check, participants were asked to indicate the extent to which they demonstrated their creativity during the idea generation process (1 = not at all, 7 = very much). Next, participants reported their horror experience

preference. Following the concept of horror entertainment consumption (Yang & Zhang, 2022), participants were asked to indicate their liking for horror experiences such as horror films or haunted houses on a 7-point scale (1 = don't like at all, 7 = like very much). Since engaging in creative or non-creative activities may trigger emotional differences among participants (Burroughs & Glen Mick, 2004), we also asked participants to report their current mood. Following Mehta et al. (2012), we presented participants with three words describing positive emotions (happy, pleasant, excited; $\alpha = 0.883$) and three words describing negative emotions (sad, frustrated, depressed; $\alpha = 0.885$). Participants needed to rate different emotion words on a 7-point scale based on their current feelings. Finally, participants completed basic demographic measures.

3.2.3 Experimental Results Manipulation Check. An independent samples t-test showed that compared to the non-creative activity group ($M = 4.70$, $SD = 1.38$), participants in the creative activity group believed they demonstrated more creativity in the idea generation task ($M = 5.84$, $SD = 0.91$; $t(196) = 6.86$, $p < 0.001$, Cohen's $d = 0.98$), indicating successful manipulation of activity type.

Horror Experience Preference. An independent samples t-test was conducted with activity type (0 = non-creative activity, 1 = creative activity) as the independent variable and horror experience preference as the dependent variable. The results showed that compared to the non-creative activity group ($M = 3.99$, $SD = 1.75$), participants in the creative activity group liked horror experiences significantly more ($M = 4.51$, $SD = 1.81$; $t(196) = 2.06$, $p = 0.041$, Cohen's $d = 0.29$). Additionally, previous research has indicated that gender and age differences may affect individuals' seeking of horror experiences (Martin, 2019). Therefore, we included gender ($F(1, 194) = 2.87$, $p = 0.092$) and age ($F(1, 194) = 0.62$, $p = 0.433$) as control variables for further analysis, and the results still showed a significant difference in horror experience preference between the creative activity group and the non-creative activity group ($F(1, 194) = 3.22$, $p = 0.044$, $\eta^2 = 0.021$).

Additional Analyses. Independent samples t-tests were conducted with activity type (0 = non-creative activity, 1 = creative activity) as the independent variable and positive and negative emotions as dependent variables. The results showed no significant difference between the creative activity group and the non-creative activity group in positive emotions ($t(196) = -0.40$, $p = 0.691$), but a significant difference in negative emotions ($t(196) = 2.10$, $p = 0.037$). Specifically, participants in the creative activity group reported higher negative emotions than those in the non-creative activity group ($M_{\text{creative}} = 2.99$, $SD = 1.29$ vs. $M_{\text{non-creative}} = 2.61$, $SD = 1.27$). This indicates that participating in creative activities triggered immediate emotional responses among participants. To further rule out the effect of emotions, we followed the approach of Schindler et al. (2019) and conducted a one-way ANCOVA with negative emotion as a control variable. The results showed that the main effect of activity type on

horror experience preference remained significant ($F(1, 195) = 6.31, p = 0.013, \eta^2 = 0.031$).

3.2.4 Discussion Study 2 tested the causal relationship between creative activity engagement and horror experience preference. The results showed that consumers who engaged in creative activities (vs. non-creative activities) liked horror experiences more, supporting H1. Study 2 also demonstrated that the effect of creative activity engagement on horror experience preference remained robust after controlling for factors that may affect horror entertainment consumption preferences, such as gender, age, and mood. The next study, Study 3, will further test the causal relationship between creative activity engagement and horror entertainment consumption preference using a new creative task.

3.3 Study 3: Replication with Alternative Manipulations

3.3.1 Experimental Design and Participants Study 3 employed a single-factor between-subjects design with activity type (creative activity vs. non-creative activity). A total of 130 university students participated in this experiment. After excluding 14 participants who did not complete the manipulation task as required, 116 participants remained (73.24% female, $M_{age} = 21.49, SD = 2.02$).

3.3.2 Experimental Procedure First, following the approach of Xu et al. (2022) and Wu et al. (2015), we used a T-shirt design task to manipulate activity type. Specifically, participants in the creative activity group were asked to design an innovative T-shirt as creatively as possible. Participants in the non-creative activity group were shown an ordinary T-shirt design and asked to copy the same T-shirt (specific instructions and participant-designed T-shirts are detailed in Appendix 2). Subsequently, following Yang and Zhang (2022), we presented participants with a horror-themed poster (see Appendix 2) and asked them to browse the poster and indicate how likely they would be to participate in this horror-themed activity (1 = very unlikely, 7 = very likely). Next, participants answered manipulation check items and emotion measurement items. Following Wu et al. (2015), the manipulation check item was “When drawing the T-shirt, I tried to be as creative as possible” (1 = strongly disagree, 7 = strongly agree). The emotion measurement items were adapted from Xu et al. (2022). Specifically, participants were asked to indicate their current feelings on the following four-item scale: “1 = very negative/very unhappy/very unpleasant/very bad, 7 = very positive/very happy/very pleasant/very good” ($\alpha = 0.911$). Finally, participants indicated their general liking for horror films (1 = don’t like at all, 7 = like very much) and reported demographic information.

3.3.3 Experimental Results Manipulation Check. An independent samples t-test showed that compared to the non-creative activity group ($M = 4.04$,

SD = 1.55), participants in the creative activity group believed they demonstrated more creativity in the T-shirt design task ($M = 4.77$, $SD = 1.31$; $t(114) = 2.76$, $p = 0.007$; Cohen's $d = 0.51$), indicating successful manipulation of activity type.

Horror Experience Preference. An independent samples t-test was conducted with activity type (0 = non-creative activity, 1 = creative activity) as the independent variable and horror experience preference as the dependent variable. The results showed that compared to the non-creative activity group ($M = 3.71$, $SD = 1.49$), participants in the creative activity group had higher willingness to participate in horror-themed activities ($M = 4.30$, $SD = 1.59$; $t(114) = 2.05$, $p = 0.043$, Cohen's $d = 0.38$). Further one-way ANCOVA was conducted with gender ($F(1, 110) = 0.31$, $p = 0.582$), age ($F(1, 110) = 0.19$, $p = 0.660$), and participants' general preference for horror films ($F(1, 110) = 47.88$, $p < 0.001$) as control variables. The results showed that the difference in horror experience preference between the creative activity group and the non-creative activity group remained significant ($F(1, 110) = 6.82$, $p = 0.010$, $\eta^2 = 0.058$).

Additional Analyses. An independent samples t-test was conducted with activity type (0 = non-creative activity, 1 = creative activity) as the independent variable and emotion as the dependent variable. The results showed no significant difference in emotion between the two groups ($M_{\text{creative}} = 4.83$, $SD = 1.09$ vs. $M_{\text{non-creative}} = 4.94$, $SD = 0.94$; $t(113) = -0.61$, $p = 0.544$).

3.3.4 Discussion Using new independent variable manipulation tasks and dependent variable measures, Study 3 replicated the results of Studies 1~2, again validating H1. Additionally, the effect remained robust after controlling for gender, age, and participants' general preferences. Finally, the results of Study 3 demonstrated that the effect of creative activity engagement on horror experience preference cannot be explained by differences in emotion. Although Studies 1~3 provide consistent evidence for H1, these studies have not revealed how creative activity engagement influences consumers' horror entertainment consumption preferences. Study 4 will explore the underlying mechanism of this effect.

4 Study 4: Testing the Mediating Effect of Self-Efficacy

Study 4a aims to test the mediating role of self-efficacy while examining and ruling out novelty seeking as a competing mechanism. Additionally, Study 4a uses participants' attitudes toward real consumption items to measure horror entertainment consumption preference, thereby enhancing the reliability of the research findings.

4.1.1 Experimental Design and Participants Study 4a employed a single-factor between-subjects design with activity type (creative activity vs. non-creative activity). The experiment was completed on the Credamo platform.

A total of 200 questionnaires were collected. After excluding 8 participants who failed the attention check, 192 valid questionnaires remained (55.7% female, $M_{age} = 28.7$, $SD = 7.34$).

4.1.2 Experimental Procedure First, participants were randomly assigned to the creative activity group or the non-creative activity group. Specifically, participants in the creative activity group were asked to conceive a vivid picture based on given words (moon, tree shadow, singing) and describe it in writing. This process required participants to use their creativity for imagination and description. In contrast, participants in the non-creative activity group were asked to copy a given sentence, a process that did not involve any creativity. Subsequently, participants answered the manipulation check item (“In the above writing task, I tried to be as creative as possible” ; 1 = strongly disagree, 7 = strongly agree). Following Yang and Zhang (2022), we presented participants with the same theme poster as in Study 3 and informed them that “this online streaming service called Horror Movie Night aims to bring together the scariest movies from around the world to provide viewers with an immersive horror experience.” Participants were then asked to indicate how likely they would be to try this horror streaming service (1 = very unlikely, 7 = very likely). A pretest showed that this material had high perceived scariness ($M = 4.28$, $t(39) = 6.50$, $p < 0.001$).

Self-efficacy was measured using the General Self-Efficacy Scale (GSES) (Zhang & Schwarzer, 1995). The scale includes 10 items (e.g., “If I try hard enough, I can always solve problems” ; “Even if others oppose me, I still have ways to get what I want” ; $\alpha = 0.904$). Participants also answered novelty seeking measurement items (“I want to seek some new experiences”). Finally, participants reported demographic information and received corresponding compensation.

4.1.3 Experimental Results Manipulation Check. An independent samples t-test showed that compared to the non-creative activity group ($M = 4.15$, $SD = 1.98$), participants in the creative activity group believed they demonstrated more creativity in the writing task ($M = 5.93$, $SD = 0.98$; $t(190) = 7.89$, $p < 0.001$, Cohen’ s $d = 1.14$), indicating successful manipulation of activity type.

Horror Entertainment Consumption Preference. An independent samples t-test was conducted with activity type (0 = non-creative activity, 1 = creative activity) as the independent variable and horror entertainment consumption preference as the dependent variable. The results showed that compared to the non-creative activity group, participants in the creative activity group were more likely to try the horror streaming service ($M_{non-creative} = 4.80$, $SD = 1.79$ vs. $M_{creative} = 5.28$, $SD = 1.55$; $t(190) = 1.99$, $p = 0.048$, Cohen’ s $d = 0.29$). Further one-way ANCOVA was conducted with gender ($F(1, 188) = 7.23$, $p = .008$) and age ($F(1, 188) = .58$, $p = .448$) as control variables. The results showed that the main effect of activity type on horror

entertainment consumption preference remained significant ($F(1, 188) = 5.25$, $p = 0.023$, $\eta^2 = 0.027$).

Self-Efficacy. An independent samples t-test was conducted with activity type (0 = non-creative activity, 1 = creative activity) as the independent variable and self-efficacy as the dependent variable. The results showed that compared to the non-creative activity group ($M = 4.93$, $SD = 0.86$), participants in the creative activity group had significantly higher self-efficacy scores ($M = 5.32$, $SD = 0.80$; $t(190) = 3.23$, $p = 0.001$, Cohen's $d = 0.47$).

Novelty Seeking. An independent samples t-test was conducted with activity type (0 = non-creative activity, 1 = creative activity) as the independent variable and novelty seeking as the dependent variable. The results showed that compared to the non-creative activity group ($M = 5.49$, $SD = 1.15$), participants in the creative activity group had significantly higher novelty seeking scores ($M = 5.86$, $SD = 1.00$; $t(190) = 2.41$, $p = 0.017$, Cohen's $d = 0.34$).

Mediation Path Analysis. We used PROCESS (Model 4, 5,000 bootstraps; Hayes, 2018) for mediation analysis. Horror entertainment consumption preference was set as the dependent variable, activity type as the independent variable (0 = non-creative activity, 1 = creative activity), and both self-efficacy and novelty seeking as mediating variables. The results showed that the indirect effect of activity type on horror entertainment consumption preference through self-efficacy was significant (indirect effect = 0.22, 95% CI = [0.06, 0.44], excluding 0), supporting H2. However, the indirect effect of activity type on horror entertainment consumption preference through novelty seeking was not significant (indirect effect = 0.03, 95% CI = [-0.06, 0.19], including 0). Detailed results are shown in Figure 2 [Figure 2: see original paper]. These results indicate that although engaging in creative activities affects both participants' self-efficacy and novelty seeking, self-efficacy is a stronger mechanism explaining the effect of creative activity engagement on horror entertainment consumption preference.

Figure 2 Mediation Path Diagram for Study 4a

4.1.4 Discussion The results of Study 4a show that self-efficacy significantly mediates the effect of creative activity engagement on horror entertainment consumption preference. Additionally, in Study 4a, we tested and ruled out novelty seeking as an alternative mediator. Although creative activity engagement also affects participants' novelty seeking tendency, self-efficacy is a more powerful driver of the above effect. However, in addition to novelty seeking, the effect of creative activity engagement on horror entertainment consumption preference may also be mediated by creative inspiration experience and pleasure. Study 4b will further test and rule out these two competing mechanisms.

4.2 Study 4b: Ruling Out Alternative Mediators

Study 4b employs a single-factor between-subjects design with activity type (creative activity vs. non-creative activity). The experiment was completed on

the Credamo platform. A total of 200 questionnaires were collected. After excluding participants who failed the attention check, 182 valid questionnaires remained (68.1% female, $M = 32.24$, $SD = 8.59$).

4.2.2 Experimental Procedure First, participants completed the same impromptu writing task as in Study 4a. Subsequently, we presented participants with a horror film poster with a brief film synopsis (see Appendix 3). After browsing the poster, participants answered two questions to indicate their preference for the horror film (“To what extent would you like this film? 1 = don’t like at all, 7 = like very much” and “How likely are you to watch this film? 1 = not at all likely, 7 = very likely” ; $r = 0.872$). Additionally, we asked participants to evaluate the scariness of the film. Post-hoc analysis showed that participants’ evaluation of the film’s scariness was significantly higher than the scale midpoint ($M = 5.31$, $t(181) = 18.33$, $p < 0.001$), indicating that our experimental material was effective.

Next, participants completed measures of self-efficacy, creative inspiration experience, and pleasure. Self-efficacy was measured using the same items as in Study 4a ($r = 0.906$). Creative inspiration experience was measured with three items adapted from Thrash et al. (2010): “I feel inspired,” “I have important ideas or insights that I want to express,” and “I have some unexpected or spontaneous ideas” (1 = strongly disagree, 7 = strongly agree; $r = 0.843$). Pleasure was measured with three items where participants indicated the extent to which they felt relaxed/pleasant/interesting on a 7-point scale (adapted from Hassanein & Head, 2007; $r = 0.676$). Finally, participants reported demographic information and received corresponding compensation.

4.2.3 Experimental Results Horror Film Preference. An independent samples t-test was conducted with activity type (0 = non-creative activity, 1 = creative activity) as the independent variable and horror film preference as the dependent variable. The results showed that compared to the non-creative activity group ($M = 3.86$, $SD = 1.74$), participants in the creative activity group had higher preference for the horror film ($M = 4.38$, $SD = 1.51$; $t(180) = 2.16$, $p = 0.032$, Cohen’s $d = 0.32$). These results support H1.

Self-Efficacy. An independent samples t-test was conducted with activity type (0 = non-creative activity, 1 = creative activity) as the independent variable and self-efficacy as the dependent variable. The results showed that compared to the non-creative activity group ($M = 4.93$, $SD = 0.78$), participants in the creative activity group had significantly higher self-efficacy scores ($M = 5.15$, $SD = 0.65$; $t(180) = 2.07$, $p = 0.040$, Cohen’s $d = 0.31$).

Creative Inspiration Experience and Pleasure. Independent samples t-tests were conducted with activity type (0 = non-creative activity, 1 = creative activity) as the independent variable and creative inspiration experience and pleasure as dependent variables. The results showed that compared to the non-creative activity group, participants in the creative activity group had higher

creative inspiration experience ($M_{\text{non-creative}} = 4.72$, $SD = 1.18$ vs. $M_{\text{creative}} = 5.39$, $SD = 0.79$; $t(180) = 4.49$, $p < 0.001$, Cohen's $d = 0.67$) and higher pleasure ($M_{\text{non-creative}} = 5.24$, $SD = 0.94$ vs. $M_{\text{creative}} = 5.49$, $SD = 0.76$; $t(180) = 1.99$, $p = 0.048$, Cohen's $d = 0.29$).

Mediation Path Analysis. To test the mechanism of the effect of creative activity engagement on horror film preference, we used PROCESS (Model 4, 5,000 bootstraps; Hayes, 2018) for mediation analysis. Horror film preference was the dependent variable, activity type was the independent variable (0 = non-creative activity, 1 = creative activity), and self-efficacy, creative inspiration experience, and pleasure were simultaneously entered as mediating variables. The results showed that the indirect effect of activity type on horror film preference through self-efficacy was significant (indirect effect = 0.13, 95% CI = [0.004, 0.31], excluding 0), validating H2. However, the indirect effects of activity type on horror film preference through creative inspiration experience (indirect effect = -0.02, 95% CI = [-0.23, 0.21], including 0) and pleasure (indirect effect = 0.07, 95% CI = [-0.01, 0.18], including 0) were not significant. Detailed results are shown in Figure 3 [Figure 3: see original paper]. These results indicate that although engaging in creative activities affects participants' self-efficacy, creative inspiration experience, and pleasure, self-efficacy is a stronger mechanism explaining the effect of creative activity engagement on horror entertainment consumption preference.

Figure 3 Mediation Path Diagram for Study 4b

4.2.4 Discussion Study 4b replicated the results of Study 4a, demonstrating that self-efficacy mediates the effect of creative activity engagement on horror entertainment consumption preference, supporting H2. Additionally, in Study 4b, we tested and ruled out alternative mediators based on creative inspiration experience and pleasure. Although creative activity engagement also affects participants' creative inspiration experience and pleasure, self-efficacy is a more powerful driver of the above effect.

5 Study 5: Testing the Moderating Role of Feedback Valence

Study 5 is a pre-registered study (AsPredicted#140825) aimed at testing H3. We predicted that when consumers receive positive (vs. negative) feedback, the effect of creative activity engagement on horror entertainment consumption preference would be significant (disappear). We also expected that self-efficacy would mediate the moderating effect of feedback valence.

5.1 Experimental Design and Participants Study 5 employed a 2 (activity type: creative activity vs. non-creative activity) $\times$ 2 (feedback valence: positive feedback vs. negative feedback) between-subjects design. We recruited 400 US participants on Prolific. After excluding participants who failed the attention check, 364 valid responses remained (51.92% female, $M_{\text{age}} = 40.75$, $SD = 15.00$).

5.2 Experimental Procedure First, participants completed the same idea generation task as in Study 2. Subsequently, following Zhou (1998), we presented participants with a feedback form (see Appendix 4) and informed them that their submitted ideas would be scored by a content analysis computer software called “QuickCon.” The feedback form contained four categories indicating participants’ ranking among all submitted ideas: (1) top 20%, (2) better than 60%, (3) better than 40%, and (4) bottom 20%. Participants in the positive feedback condition were told that their submitted ideas ranked in the top 20%, while participants in the negative feedback condition were told that their submitted ideas ranked in the bottom 20%. Participants then completed a manipulation check item for feedback valence (“Please indicate whether the feedback you received from the computer software was positive or negative” 1 = definitely negative, 7 = definitely positive).

Next, participants were shown a poster for a horror movie night event (same as in Study 3) and informed that “Horror Movie Night aims to bring together the scariest movies from around the world, allowing viewers to be completely immersed in the scariest atmosphere.” Participants then answered three questions to indicate their preference for horror films (“Please indicate how much you would like this experience,” “Please indicate how much you would enjoy this experience,” and “Please indicate how likely you are to try this experience” 1 = not at all, 7 = very much; $\alpha = 0.981$). Finally, participants completed the GSES self-efficacy scale ($\alpha = 0.926$) and reported their household income and demographic information.

5.3 Experimental Results Manipulation Checks. An independent samples t-test showed that compared to the non-creative activity group ($M = 3.11$, $SD = 1.87$), participants in the creative activity group believed they demonstrated more creativity in the idea generation task ($M = 5.97$, $SD = 1.05$; $t(362) = 18.10$, $p < 0.001$, Cohen’s $d = 1.89$), indicating successful manipulation of activity type. Another independent samples t-test showed that compared to the negative feedback condition ($M = 1.91$, $SD = 1.26$), participants in the positive feedback condition believed they received more positive feedback ($M = 6.46$, $SD = 1.07$; $t(362) = 36.67$, $p < 0.001$, Cohen’s $d = 3.89$), indicating successful manipulation of feedback valence.

Horror Film Preference. A 2 (activity type: creative activity vs. non-creative activity) $\times$ 2 (feedback valence: positive vs. negative) ANOVA was conducted with horror film preference as the dependent variable. The results showed a significant two-way interaction between activity type and feedback valence ($F(1, 360) = 6.58$, $p = 0.011$, $\eta^2 = 0.018$) (see Figure 4 [Figure 4: see original paper]). Under positive feedback conditions, participants who engaged in creative activities had higher preference for horror films than those who engaged in non-creative activities ($M_{\text{creative}} = 4.63$, $SD = 1.98$ vs. $M_{\text{non-creative}} = 3.54$, $SD = 2.10$; $F(1, 360) = 9.71$, $p = 0.002$, $\eta^2 = 0.026$). This result replicates the findings of Studies 1~4. However, under negative feedback conditions, the main

effect of activity type on horror film preference disappeared ($M_{\text{creative}} = 3.58$, $SD = 2.30$ vs. $M_{\text{non-creative}} = 3.69$, $SD = 2.38$; $F(1, 360) = 0.13$, $p = 0.724$). Finally, one-way ANCOVA was conducted with household annual income ($F(1, 352) = 0.61$, $p = 0.434$) as a control variable. The results showed that the two-way interaction between activity type and feedback valence on horror film preference remained significant ($F(1, 352) = 6.11$, $p = 0.014$, $p^2 = 0.017$).

Figure 4 Moderating Effect of Feedback Valence in Study 5

Moderated Mediation Analysis. Using PROCESS (Model 7, 5,000 samples; Hayes, 2018) for bootstrapping analysis, the results indicated a significant moderated mediation effect (indirect effect = 0.13, 95% CI = [0.01, 0.35], excluding 0). Specifically, when participants received positive feedback, self-efficacy mediated the effect of creative activity engagement on horror film preference (indirect effect = 0.10, 95% CI = [0.01, 0.26], excluding 0). However, when participants received negative feedback, the indirect effect of self-efficacy disappeared (indirect effect = -0.03, 95% CI = [-0.14, 0.06], including 0). The specific path coefficients of the model are shown in Figure 5 [Figure 5: see original paper].

Figure 5 Moderated Mediation Effect Diagram for Study 5

The results of Study 5 support H3, showing that when participants receive positive feedback about their performance, engaging in creative activities promotes their preference for horror entertainment consumption, but when participants receive negative feedback, this effect disappears. Additionally, Study 5 found that the moderating effect of feedback valence is mediated by self-efficacy. That is, when participants receive negative feedback, the mediating effect of self-efficacy disappears. This is because negative feedback weakens the self-efficacy aroused by creative activity engagement, thereby reducing participants' preference for horror entertainment consumption.

6 Study 6: Testing the Moderating Role of Activity Difficulty

Study 6 is a pre-registered study (AsPredicted#164331) aimed at verifying whether creative activities of different difficulties have different effects on horror entertainment consumption. Additionally, Study 6 uses consumers' real choices of horror entertainment products as the dependent variable to enhance the robustness and external validity of the research findings.

To select creative tasks of different difficulty levels, we conducted a pretest. Following previous research, we selected three commonly used creativity tasks: the unusual uses task, the impromptu creation task, and the candle insight task (Chen & Zheng, 2015). Sixty participants were randomly assigned to complete one of the three creative tasks (61.3% female, $M_{\text{age}} = 33.63$, $SD = 11.20$). Specifically, the unusual uses group was asked to write creative uses for a plastic bottle; the impromptu creation group was asked to write a creative story around given words; and the candle insight group was asked to write a solution to the candle problem. Subsequently, all participants were asked to evaluate the

creativity and difficulty of the task they participated in.

The results showed that the unusual uses task had low difficulty ($M = 3.75$, $SD = 1.48$), the impromptu creation task had moderate difficulty ($M = 4.20$, $SD = 1.94$), and the candle insight task had the highest difficulty ($M = 4.85$, $SD = 1.35$). There were no significant differences in creativity level among these three creative tasks ($M_{unusual} = 5.70$, $SD = 1.08$ vs. $M_{impromptu} = 5.55$, $SD = 1.10$ vs. $M_{candle} = 5.80$, $SD = 1.06$; $F(1, 57) = 0.27$, $p = 0.763$). Based on this, we selected the unusual uses task and the candle insight task as materials for the formal experiment.

6.2 Experimental Design and Participants Study 6 employed a 2 (activity type: creative activity vs. non-creative activity) $\times$ 2 (activity difficulty: high vs. low) between-subjects design. We recruited 340 undergraduate students at a university in northwestern China. After excluding 13 participants who failed the attention check, 327 participants remained (61.8% female, $M_{age} = 21.16$, $SD = 2.67$).

6.3 Experimental Procedure First, participants were randomly assigned to one of four experimental groups. Specifically, participants in the low-difficulty creative activity group and the high-difficulty creative activity group completed the same unusual uses task and candle insight task as in the pretest, respectively. Participants in the low-difficulty non-creative activity group and the high-difficulty non-creative activity group completed mathematical operation tasks of different difficulty levels (see Appendix 5). Subsequently, participants answered manipulation check items for activity type and activity difficulty, and completed the GSES self-efficacy scale ($\alpha = 0.904$). Next, participants were informed that as participants in this study, they would participate in a lottery and those who won could choose one of two popular audiobooks as a prize. We then presented participants with the horror novel *Ghost Blows Out the Light* and the historical novel *Those Things in the Ming Dynasty*, and asked them to choose one as their prize. An independent pretest showed that there was no difference in liking between these two audiobooks ($t(59) = -1.66$, $p = 0.103$), but there was a difference in perceived scariness ($M_{horror} = 5.45$ vs. $M_{history} = 3.33$; $t(59) = 8.23$, $p < 0.001$), indicating that the experimental materials were effective. Finally, participants reported their demographic information and general preference for novel genres. After completion, participants entered the lottery, and two participants won and received corresponding prizes.

6.4 Experimental Results Manipulation Checks. An independent samples t-test showed that compared to the non-creative activity group, participants in the creative activity group believed they demonstrated more creativity in the task ($M_{creative} = 4.59$, $SD = 1.69$ vs. $M_{non-creative} = 3.37$, $SD = 1.83$; $t(325) = 6.24$, $p < 0.001$, Cohen's $d = 0.69$), indicating successful manipulation of activity type. Another independent samples t-test showed that compared to the low-difficulty group, participants in the high-difficulty group perceived the task

as more difficult ($M_{high} = 4.27$, $SD = 1.67$ vs. $M_{low} = 2.61$, $SD = 1.75$; $t(325) = 8.74$, $p < 0.001$, Cohen's $d = 0.97$), indicating successful manipulation of activity difficulty.

Horror Audiobook Choice. A 2 (activity type: creative activity vs. non-creative activity) $\times$ 2 (activity difficulty: high vs. low) ANOVA was conducted with audiobook choice (0 = historical genre, 1 = horror genre) as the dependent variable. The results showed a significant two-way interaction between activity type and activity difficulty ($F(1, 323) = 3.96$, $p = 0.047$, $\eta^2 = 0.012$). Specifically, when activity difficulty was low, participants in the creative activity group chose the horror audiobook significantly more often (34.8%) than those in the non-creative activity group (19%) (Pearson $\chi^2(1) = 4.80$, $p = 0.029$). However, when activity difficulty was high, there was no significant difference in the proportion of horror audiobook choices between the creative activity group and the non-creative activity group (24.7% vs. 28.4%; Pearson $\chi^2(1) = 0.31$, $p = 0.578$). Finally, one-way ANCOVA was conducted with participants' general preference for novel genres ($F(1, 322) = 3.24$, $p < 0.001$) as a control variable. The results showed that the two-way interaction between activity type and activity difficulty on horror audiobook choice remained significant ($F(1, 322) = 3.66$, $p = 0.057$, $\eta^2 = 0.011$).

Moderated Mediation Analysis. Using PROCESS (Model 7, 5,000 samples; Hayes, 2018) for bootstrapping analysis, the results indicated a significant moderated mediation effect (indirect effect = -0.18, 95% CI = [-0.44, -0.01], excluding 0). Specifically, when activity difficulty was low, self-efficacy mediated the effect of creative activity engagement on horror audiobook choice (indirect effect = 0.11, 95% CI = [0.001, 0.31], excluding 0). However, when activity difficulty was high, the indirect effect of self-efficacy disappeared (indirect effect = -0.07, 95% CI = [-0.21, 0.04], including 0). The specific path coefficients of the model are shown in Figure 6 [Figure 6: see original paper].

Figure 6 Moderated Mediation Effect Diagram for Study 6

Consistent with H4, Study 6 demonstrates that engaging in low-difficulty creative activities (vs. non-creative activities) enhances participants' self-efficacy, thereby increasing their choice of horror entertainment consumption. However, engaging in high-difficulty creative activities does not produce this effect. This is because high-difficulty creative activities weaken participants' self-efficacy, thereby reducing their preference for horror entertainment consumption.

7.1 Research Conclusions

As the horror entertainment consumption market continues to expand, the factors that influence consumers' preferences and choices for horror entertainment consumption have become a topic worth exploring. Based on a cross-context perspective, this paper for the first time examines whether and how consumers' prior engagement in creative activities affects their subsequent preferences for horror entertainment consumption. Seven studies involving different horror ex-

periences and products provide consistent support for our propositions. First, using real box office data, Study 1 found that countries with higher innovation performance also consume more horror films, and this phenomenon does not exist in the consumption of other film genres (e.g., romance and documentary). Subsequent Studies 2~3 provided causal evidence for the relationship between creative activity engagement and horror entertainment consumption, showing that prior engagement in a creative activity promotes consumers' subsequent preference for horror entertainment consumption. Studies 4a~4b further revealed that the mediating mechanism of the above effect is self-efficacy, while ruling out competing mediating explanations such as novelty seeking, creative inspiration experience, and pleasure. Finally, Studies 5~6 demonstrated that the above phenomenon disappears when consumers receive negative feedback about their activity performance and when the creative activity they engage in is highly difficult.

7.2 Theoretical Contributions

The theoretical contributions of this paper are mainly reflected in three aspects. First, this paper advances and complements the literature on horror entertainment consumption. Previous research mainly discussed the reasons why consumers do or do not engage in horror entertainment consumption from a same-context perspective, including but not limited to seeking sensory stimulation, obtaining complex experiences, escaping from the mundane self, and perceived resource scarcity (Andrade & Cohen, 2007; Keinan & Kivetz, 2011; Scott et al., 2017; Tamborini & Stiff, 1987; Yang & Zhang, 2022). This paper explores a novel research topic from a cross-context perspective: whether consumers' prior experiences in unrelated

Note: Figure translations are in progress. See original paper for figures.

Source: ChinaXiv – Machine translation. Verify with original.