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Abstract. At present, script killing games have become a popular means of entertainment and social interaction among urban youth, but the exciting scenes such as violence, spirituality, and blood have also raised public concerns about players' mental health. A sense of security is considered the most important factor determining mental health, which can be subdivided into interpersonal security and a sense of definite control. This study uses the interactive ritual chain theory to explore the impact of script killing games on players' sense of security. Research has found that script killing games enhance players' sense of interpersonal security, and their sense of interpersonal security increases with the number of games played; The number of games has no significant impact on determining the sense of control. Further analysis reveals that script killing games, as a highly interactive ritual, can generate strong emotional connections among players and provide emotional energy feedback to participants, leading to self-identity and group belonging. This feedback can be further extended to reality, thereby enhancing players' perception of interpersonal security.

Keywords: Interactive ritual chain; Script killing game; Sense of security; Emotional energy.

1. Introduction

The script killing game originated from the popular party game Jury Box in the United States in the 1930s, and later developed into a reasoning game mode. As a continuously evolving form of reasoning games, script killing games are a typical role-playing game. In 2013, script killing games were introduced to China from abroad. In 2016, the popular variety show "Star Detective" on Hunan TV was broadcasted, which opened up Chinese awareness of script killing and quickly made it the main leisure and entertainment activity favored by young people. According to data from iMedia Consulting, in the first half of 2021, among the offline trend entertainment methods preferred by Chinese consumers, script killing games ranked third. In the script killing game, players need to immerse themselves in the characters in the script and identify the hidden killer through immersive interpretation. In order to create a good gaming experience for players, businesses may intentionally use room displays, audio, lighting, etc. to create a terrifying atmosphere, or hire people to play ghosts to intimidate players. Furthermore, the detailed descriptions of crime, murder techniques, and supernatural events in the script have raised concerns among various sectors of society about the mental health of players, especially young players.

The most important factor determining mental health is a sense of security, which was first seen in the theoretical research of Freudian psychoanalysis. The World Health Organization's definition of security is: "As people age, their needs and rights for social, financial, and personal security." [1] The definition used in this study is that security is a premonition of potential physical or psychological danger or risk, as well as a sense of strength/powerlessness in response and disposal, mainly manifested as a sense of certainty and controllability. [2] Many previous studies on the impact of gaming have focused on the effects of gaming addiction on individuals, such as physical or mental health. [3] Research typically focuses on the negative outcomes of excessive gaming, such as increased loneliness, decreased self-esteem, or increased aggression. Some studies have also revealed the positive effects of games, such as online dating and building social capital. [4] In fact, games have been found to be a very popular and effective medium that can restore a person's mental
health. [5] Some electronic games are also believed to alleviate depression symptoms in teenagers and help elderly people escape social isolation. Based on this, the research question of this article is raised: Will script killing games affect players' sense of security in real society? Will the number and mode of participation affect players' perception of security? What is the mechanism of this impact?

2. Research design

According to research data from iMedia in March 2021, the age of users of script killing game players is 19-40 years old. Therefore, this article limits the age of the survey subjects to 18-40 years old. This study utilized the Security Questionnaire (SQ) developed by Congzhong and An Lijuan, [2] which consists of 16 items and is divided into two factors: interpersonal security factor and deterministic control factor. The questionnaire is divided into three parts. The first part measures the respondents' sense of security, and the evaluation is conducted using the Likert five level scale. The second part is demographic information. The third part is the measurement of players' game behavior, with independent variables being whether they have played script killing games, game time, game frequency, and game style, and the dependent variable being sense of security.

3. Sample data analysis

This questionnaire was distributed through channels such as Tieba, Weibo, Moments, and WeChat groups. A total of 182 questionnaires were collected, and after excluding invalid questionnaires, a total of 175 valid questionnaires were obtained. Through SPSS for reliability and validity testing, the overall Alpha coefficient of the questionnaire is 0.825, and the KMO value is 0.943, indicating that the data has good reliability and validity.

A correlation analysis was conducted on game time, game frequency, game style, and sense of security. There was no correlation between game time, game style, interpersonal security, sense of control, and overall security, indicating that game time and game style do not have an impact on players' sense of security. The number of games has a significant correlation with interpersonal security, deterministic control, and overall security, with significance of 0.001, 0.048, and 0.005, all less than 0.05, indicating that the number of games significantly affects players' sense of security.

To further examine the causal relationship between variables, regression analysis was conducted in this study. Using interpersonal security as the dependent variable and game style, game time, and game frequency as independent variables, regression analysis was conducted. The results showed that the goodness of fit R-squared of the model was 0.109, and the adjusted R-squared was 0.084, indicating that the independent variable explained 8.4% of the variation in the dependent variable; The ANOVA analysis of variance had an F-value of 4.319 and a P-value of 0.006 (less than 0.01), which passed the significance test at the 1% significance level, indicating that the overall effectiveness of the model was good and statistically significant; The tolerance of independent variables in the model is greater than 0.1, and the VIF is less than 5, indicating that there is no serious collinearity between the independent variables.

The results of regression analysis show that the game time( $\beta =-0.377$, P>0.05), gameplay( $\beta =-0.188$, P>0.05) had no significant impact on interpersonal security. The t-value of the number of games is 3.297( $\beta = 1.372$, P<0.01), passed the 1% significance level test and had a significant positive impact on interpersonal security. The more times you participate in games, the higher your perception of interpersonal security.

Using the sense of control as the dependent variable and game style, game time, and game frequency as the independent variables, regression analysis was conducted. The results showed that the goodness of fit of the model, R-squared, was 0.045, and the adjusted R-squared was 0.018, indicating that the independent variable could only explain 1.8% of the dependent variable variation; The ANOVA analysis of variance had an F-value of 1.652 and a P-value of 1.182 (greater than
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0.01), which failed the significance test at the 1% significance level, indicating poor fitting of the model and lack statistical significance. And the results of regression analysis show that the game time( $\beta$ =0.62, $P>0.05$), number of games played( $\beta$ =0.684, $P>0.05$), gameplay( $\beta$ =0.14, $P>0.05$) had no significant effect on determining the sense of control.

Using total sense of security as the dependent variable and game style, game time, and game frequency as independent variables, regression analysis was conducted. The results showed that the goodness of fit of the model, R-squared, was 0.072, and the adjusted R-squared was 0.046, indicating that the independent variable could only explain 4.6% of the variation in the dependent variable; The ANOVA analysis of variance had an F-value of 2.742 and a P-value of 0.047 (greater than 0.01), which failed the significance test at the 1% significance level, indicating that the model was not statistically significant. And the results of regression analysis show that the game time( $\beta$ =0.243, $P>0.05$), number of games played( $\beta$ =2.055,$P>0.05$), gameplay( $\beta$ =-0.048,$P>0.05$) had no significant impact on overall safety.

4. Conclusion and Interpretation

4.1 Entertainment and social motivation affect game effectiveness

Through differential analysis, correlation analysis, and regression analysis, it can be concluded that participating in script killing games affects players' sense of interpersonal security and overall security, but has no effect on determining their sense of control. The more times players participate in script killing games, the stronger their sense of interpersonal security, but the number of games has no significant impact on their overall sense of security and sense of control. The duration and gameplay style of the game have no significant impact on players' interpersonal security, deterministic control, and overall security. This article speculates that the enhancement of players' interpersonal security and overall security in script killing games may be related to their social motivation.

Game motivation is the intrinsic motivation for young players to participate in role-playing games, determining their specific behavior in the game, which will affect the effectiveness of the game. Therefore, game motivation is an important variable that explains players' game behavior and effects. At present, the majority of research on game motivation at home and abroad mainly includes the following aspects: social interaction, entertainment, achievement experience, escape from reality, etc. The main motivations for players to participate in the "script killing game" in this study are: entertainment enjoyment (68.18%), social needs (52.73%), and liking reasoning (49.09%), all of which are positive motivations. In the script killing game, players with entertainment and social needs step out of their closed social circles and engage in in-depth communication with family, friends, or unrelated strangers around the goal of "finding the real culprit". Players temporarily leave the chaos of real society and immerse themselves in the world of fantasy stories, engaging in situational dialogues. Based on different personal perspectives, there are differences in the timeline, clues, and details that players encounter in the same story, and the complete storyline requires players to piece together each other to complete. In order to find the real culprit, players must make every effort to communicate effectively with other players. In this process, players establish an interactive and mobile community, and a few unfamiliar individuals gain unparalleled emotional experiences in the brief hours of role-playing. Interpersonal security mainly reflects an individual's experience of security in interpersonal communication, and it is not surprising that this successful social experience enhances the player's sense of interpersonal security.

4.2 Highly interactive rituals bring emotional energy feedback

Ritual is essentially a physical process that begins when people's bodies gather at the same location. Being present in person makes it easier for people to perceive others' signals and physical expressions, enter the same rhythm, capture others' postures and emotions, and confirm a common focus of attention. Script killing games are highly interactive rituals, where both online and offline players gather in both real and virtual offline spaces. Due to the unique immersive nature of script
killing games, more players choose to participate offline. The physical gathering in the offline space, realistic story environment, and dressing experience, coupled with the high level of attention and emotional engagement of players, all brought this interactive ceremony to a climax. When these elements are effectively integrated and accumulated to a high level of mutual attention and emotional sharing, the participants of the game will develop group unity, while also gaining individual emotional energy, that is, a feeling of confidence, cheerfulness, strength, enthusiasm, and initiative when taking action. Through such a highly interactive ceremony, players complete this ceremony together with other players during the immersive performance process. Players not only find their own identity positioning, but also gain emotional resonance with other game participants psychologically. The other participants in this ceremony are all members of the group they believe to be, and each member feels closely related to this group, full of a sense of collective unity, This brings them a high level of emotional energy feedback, generating a sense of group belonging that makes players feel safe, leading to an increase in their interpersonal security.

5. Conclusion

The motivation for players to participate in script killing games is more out of social interaction, which means that the game environment itself is trusted, accepted, and inclined. The game setting of script killing effectively alleviates the panic and anxiety of contemporary youth in social interaction. Players can jump out of social reality and converse with other players in a virtual story space. Through this effective and sincere communication, they can ultimately establish more familiar social relationships with other players. In addition, script killing games are a highly interactive ritual where players share their focus and emotions during the interaction. Through immersive interpretation, they not only gain self-identity and find their own belonging, but also establish emotional connections with other players, gaining personal emotional energy and a sense of group belonging. The emotions and relationships gained in script killing games will further extend to the real world, where highly connected emotional interaction rituals and successful social experiences enhance players' sense of interpersonal security. The limitation of this study is that the small sample size obtained results in insufficient explanatory power of the regression analysis model; Secondly, there is a lack of clear analysis of the diversity of game types in scripts, and whether different types of scripts have different impacts on players' sense of security; Thirdly, research is mainly conducted through quantitative data, and in the future, qualitative research should be conducted to further explore deeper reasons.

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References