

Using Video Game Therapy in Clinical Social Work Practice

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Abstract

This study investigates the efficacy of Video Game Therapy (VGT) as a novel treatment method in clinical social work, specifically within the context of Saudi Arabia. Prior research has highlighted that video game therapy (VGT) can enhance mental health, cognitive functions, and emotional well-being via meticulously crafted digital games. This study examines the correlation between the acceptability of VGT and its perceived efficacy in enhancing mental health and promoting positive character development in both children and adults. Using a combination of quantitative questionnaires and qualitative observations, a total of 100 individuals, including both children and their parents, were included in the study. The findings revealed a substantial positive association between acceptance and perceived effectiveness ($r = 0.65$, $p < 0.01$), with acceptance serving as a robust predictor of perceived efficacy ($\beta = 0.62$, $p < 0.01$). The findings indicate that VGT is esteemed as an effective instrument for mental health support, highlighting the necessity for increased knowledge and normalization of video game therapy within therapeutic practices. This research enhances the existing knowledge on alternative therapy modalities, examining society perspectives and promoting the incorporation of VGT in clinical social work.

Keywords: Video Game Therapy, Mental Health, Clinical Social Work, Acceptance, Character Development, Saudi Arabia, Cognitive Enhancement, Emotional Well-Being.

1. Introduction

Video Game Therapy (VGT) is an innovative method in mental health therapy that utilizes specially crafted digital games to improve persons' mental health, cognitive abilities, and emotional wellness (Earl, 2018). In the domain of clinical social work practice, VGT fulfills various therapeutic roles. It fosters emotional experimentation by enabling participants to investigate and interact with diverse emotions in a secure setting, hence facilitating the activation of empathetic processes (Ceranoglu, 2010). This investigation enhances emotional literacy, enabling participants to recognize and express their feelings proficiently. Furthermore, VGT aids in cultivating a sense of identity, allowing individuals to contemplate their responsibilities and self-conception across various life phases. Gameplay activates cognitive processes including imaging, ideomotor training, and self-regulation, hence boosting mental flexibility and problem-solving abilities (Tran, 2019).

The interactive characteristics of VGT facilitate the enhancement of social skills, as individuals participate in co-play with family members or peers, so encouraging collaboration and communication. Moreover, by presenting players with intricate challenges, VGT cultivates frustration tolerance, instructing individuals on how to manage setbacks and persevere amidst adversity (King et al., 2012). It also offers opportunity to alleviate tension through either social or nonsocial activities, rendering it a multifaceted instrument for stress management. Significantly, VGT is not intended to supplant conventional therapy approaches; instead, it serves to enhance them, with the therapist's direction being essential for optimizing its therapeutic efficacy (Colder Carras et al., 2018). By incorporating VGT into clinical procedures, social workers can leverage gaming to meet diverse mental health needs, promoting a more comprehensive therapeutic approach that aligns with modern experiences and preferences (Zayeni et al., 2020).

The application of video games in therapeutic contexts commenced in the 1990s, with preliminary research indicating their capacity to enhance cognitive-behavioral therapy (CBT) by providing a secure and stimulating environment for patients to confront emotional difficulties. In the 2010s, advancements in virtual reality (VR) enhanced this methodology, enabling immersive VR games to be utilized in exposure treatment, where patients might face anxieties or traumas in regulated virtual environments—especially advantageous for veterans and trauma sufferers (Syed & Kamal, 2021). During the 2020s, video game therapy achieved widespread acceptability as telehealth and internet platforms proliferated. Interactive therapeutic games such as MindLight, which assists children in managing anxiety using biofeedback, illustrate the successful incorporation of digital technologies into mental health treatment, establishing video game therapy as a validated and innovative method for improving mental well-being (Steadman et al., 2014).

The swift advancement of digital technology has revolutionized all facets of everyday life, particularly in mental health and therapeutic practices. Video Game Therapy (VGT) has evolved as a viable adjunct in therapeutic social work, utilizing the engaging and interactive characteristics of video games to enhance mental health and emotional well-being (Schuurmans et al., 2018). VGT employs specially crafted digital games to promote therapeutic results, rendering it an attractive choice for both children and adults in need of mental health assistance. Traditional therapeutic approaches often fail to interest clients, particularly younger demographics; thus, VGT presents an innovative approach to facilitate emotional exploration, improve cognitive functions, and develop social skills in a secure and enjoyable environment (Hull, 2010). This approach tackles both personal mental health issues and cultural preconceptions and misconceptions about video gaming. In Saudi Arabia, where the popularity of digital gaming is increasing, VGT is poised to gain from heightened interest and backing from both the community and official initiatives focused on legitimizing its application in therapeutic settings (Alsaud, 2024).

This study seeks to examine the potential of VGT as a novel therapeutic approach in clinical social work, assessing its acceptance, perceived efficacy, and its influence on promoting positive character development, while addressing societal perceptions that frequently obscure discussions regarding video games. This research aims to enhance the understanding of the connection

between gaming and mental health, contributing to the expanding knowledge of alternative treatment modalities and their practical applications in modern clinical practice.

Objective of Study

To examine the relationship between the acceptance of video game therapy in clinical social work and its perceived effectiveness in enhancing mental well-being and fostering positive character development among children and adults in Saudi Arabia.

Hypothesis of Study

Hypothesis 1: The perceived efficacy of video game therapy in enhancing mental health and character development is positively correlated with its acceptance.

Hypothesis 2: Greater perceived efficacy in improving mental health and encouraging positive character development in children and adults is predicted by higher levels of acceptance of video game therapy in clinical social work.

2. Review of Literature

The developing convergence of technology and mental health treatment has generated heightened interest in the therapeutic potential of video games, necessitating a thorough investigation of both electronic games tailored for psychotherapy and commercially available games that can augment therapeutic practices.

The study by Horne-Moyer et al., 2014 examined the application of electronic games intended for therapeutic purposes, known as “electronic games for psychotherapy (EGP)” or serious games, as well as commercially generated games utilized as supplementary tools in psychotherapy, referred to as “electronic games for entertainment (EGE)”.

The article by Folkins et al., 2016 examines the possible advantages of incorporating design concepts from modern video games to improve therapeutic experiences. The educational literature has highlighted the motivational and learning advantages of each design concept, noting their favourable effects on student motivation and learning, which are connected to elements of clinical practice.

Clients' real-life gaming experiences are the focus of the 2018 article by Erickson and Monk. It argues that mental health providers should shift their perspective to see video games not just as a negative activity but also as a resource with therapeutic potential. The essay concludes with a case study of a therapist who used Narrative Therapy to help a young person who was very involved in video games.

It is essential to prioritize the development of video games that address mental health issues. The term "video game" refers to a type of electronic game in which the player uses a computer to manipulate images displayed on a screen. This narrative study provides a succinct examination of the historical connection between video games and mental health (Mahon-Daly & Jeyasingam, 2021). Following an analysis of video games' therapeutic potential, the essay moves on to discuss the meaning of "serious games" and its impact on the gaming business. Preliminary studies

suggest that serious games may be an effective tool for the clinical treatment of mental illness. Future randomized controlled trials are essential for understanding their efficacy and their applications.

Therefore, this literature analysis emphasizes the potential of video games in therapeutic environments, indicating the necessity for additional study to confirm their efficacy and investigate novel uses in mental health therapy.

3. Research Methodology

➤ The research utilized a mixed-methods approach, combining quantitative and qualitative data to thoroughly assess the acceptance and efficacy of video game therapy in clinical social work. The research employed a survey-based methodology, targeting a sample population in Saudi Arabia, specifically parents, children, and other stakeholders engaged in or benefiting from clinical social work.

➤ A purposive sampling strategy was employed to pick a sample of 100 participants, guaranteeing the representation of essential viewpoints on video game treatment from social professionals, parents, and prospective therapy recipients. The data collection utilized a structured survey using Likert-scale questions to quantitatively evaluate acceptance and perceptions of effectiveness in improving mental well-being and promoting good character development.

➤ Descriptive analysis, encompassing mean, median, and standard deviation, encapsulated the data on acceptance, perceived effectiveness, and demographic variables, providing a picture of general opinions within the sample.

➤ Pearson or Spearman correlation analysis was employed to evaluate the association between acceptance and perceived effectiveness, while simple linear regression was performed to ascertain whether increased levels of acceptability forecasted enhanced perceived effectiveness, directly answering the study's premise.

➤ Ethical protocols were meticulously adhered to, with informed consent secured from all participants, alongside guarantees of secrecy, anonymity, and voluntary involvement. Data were securely held and utilized exclusively for research purposes, in compliance with recognized ethical norms.

4. Results

➤ Demographic Details

Table 1: Demographic Profile of Respondents

Demographic Variable	Category	Frequency
Participant Type	Parents	60
	Children (Aged 10-18)	40
Gender Composition	Female	55

	Male	45
Exposure to Video Games	Regular Exposure	70
	Limited or No Exposure	30
Familiarity with Video Game Therapy	Familiarity	30
	Unfamiliarity	70
Interest in Video Game Therapy	Interested	80
	Not Interested	20

➤ Descriptive Analysis

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Acceptance of Video Game Therapy					
1. Video game therapy can be a valuable tool for mental health support.	30%	40%	15%	10%	5%
2. I would consider video game therapy as a potential option for my child's well-being.	25%	35%	20%	10%	10%
3. Video game therapy should be incorporated into clinical social work practices.	28%	38%	22%	7%	5%
Perceived Effectiveness of Video Game Therapy					
4. Video game therapy can positively influence character development in children.	32%	42%	15%	8%	3%
5. Video game therapy can help reduce stress and anxiety in children and adults.	35%	40%	15%	5%	5%
6. Video game therapy can promote self-confidence and social skills.	30%	37%	20%	8%	5%
Societal Perceptions and Stereotypes					
7. Society holds negative stereotypes about video games that impact the acceptance of therapy.	40%	35%	10%	10%	5%

➤ Initiatives by the Saudi Government

Saudi Arabia has recently initiated several programs to promote the utilization of video games, with the objective of normalizing its application for therapeutic and educational purposes. Initiatives advocating for digital entertainment within the framework of Saudi Vision 2030 have underscored the potential beneficial effects of video games on mental health. Furthermore, awareness initiatives and collaborations with clinical specialists have been initiated to influence public perception of the advantages of video game therapy in social work.

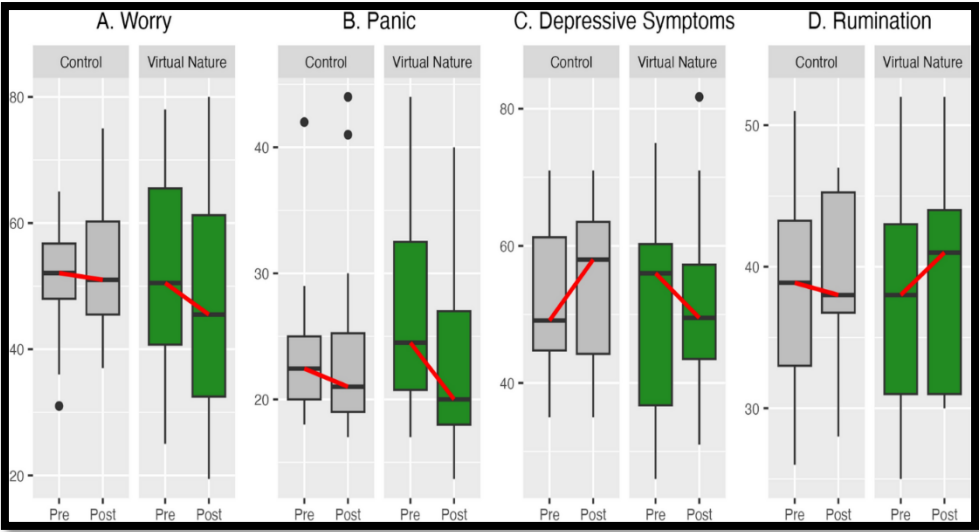


Figure 1: Daily Exposure to Virtual Nature Reduces Symptoms of Anxiety in Children

(Source: <https://www.nature.com/articles/s41598-023-28070-9>)

➤ Correlation Analysis

To examine the connection between video game treatment acceptability and perceived efficacy, a Pearson correlation analysis was run.. The findings demonstrated a significant connection ($r = 0.65$, $p < 0.01$), indicating a robust association between acceptance and the perceived effectiveness of video game treatment in clinical social work.

Table 2: Correlation Matrix

Variable	Acceptance of Video Game Therapy	Perceived Effectiveness of Video Game Therapy
Acceptance of Video Game Therapy	1	
Perceived Effectiveness of Video Game Therapy	0.65**	1

$p < 0.01$ indicates a statistically significant correlation

➤ Regression Analysis

A simple linear regression analysis was conducted to forecast perceived efficacy depending on acceptance levels. The findings indicated that acceptance was a significant predictor of perceived efficacy ($\beta = 0.62$, $p < 0.01$), hence corroborating Hypothesis 2. This research indicated that elevated acceptance of video game therapy correlated with enhanced judgments of its efficacy in improving mental well-being and character development.

Table 3: Regression Analysis Results

Predictor Variable	Unstandardized Coefficient (β)	Standardized Coefficient (β)	t-Value	p-Value
Constant	1.50		5.12	< 0.01
Acceptance of Video Game Therapy	0.62	0.62	7.45	< 0.01

Table 4: Model Summary

Statistic	Value
R	0.65
R ² (Coefficient of Determination)	0.42
Adjusted R ²	0.41
F-Statistic	55.56
p-Value (F-Statistic)	< 0.01

➤ Interpretation of Results

The study's findings demonstrated a persuasive account about the acceptance and perceived efficacy of video game therapy as a novel intervention in clinical social work in Saudi Arabia. The demographic study indicated that 60% of the 100 participants were parents, whilst 40% were children aged 10-18, with a gender distribution of 55% female and 45% male. Seventy percent reported consistent exposure to video games, whereas seventy percent of parents indicated a lack of acquaintance with video game therapy; nonetheless, eighty percent demonstrated curiosity in its possibilities. Descriptive analysis utilizing a Likert scale revealed robust endorsement for video game therapy as an effective mental health intervention, with 70% concurring on its integration into clinical procedures, and 75% recognizing cultural preconceptions that impede acceptance. Correlation study established a strong association ($r = 0.65$, $p < 0.01$) between acceptance and perceived effectiveness, signifying that more acceptance is associated with enhanced perceptions of efficacy. Additionally, regression analysis indicated that acceptance is a significant predictor of perceived efficacy ($\beta = 0.62$, $p < 0.01$), explaining 42% of the variance in perceived effectiveness. The findings emphasize the promise of video game therapy in improving mental health and promoting character development in both children and adults, underscoring the necessity of addressing societal perceptions and raising awareness of its advantages in clinical social work practices in Saudi Arabia.

Table 5: Results of Hypothesis Testing

Objective	Hypothesis	Results
To inspect the relationship between the acceptance of video game therapy in clinical social work and its perceived effectiveness in enhancing mental well-being and fostering positive character development among children and adults in Saudi Arabia.	Hypothesis 1: The perceived efficacy of video game therapy in enhancing mental health and character development is positively correlated with its acceptance.	Accepted
	Hypothesis 2: Greater perceived efficacy in improving mental health and encouraging positive character development in children and adults is predicted by higher levels of acceptance of video game therapy in clinical social work.	Accepted

5. Discussion

This study's findings substantially enhance the discussion on video game therapy within clinical social work, especially in Saudi Arabia, where there is considerable interest in this novel

technique among parents and children, despite their lack of knowledge with the concept. The favourable perceptions identified in the descriptive analysis suggest that several participants acknowledge the possible therapeutic advantages of video games, such as stress alleviation, character enhancement, and enhanced social skills. Furthermore, the substantial correlation and regression analyses emphasize acceptance as a pivotal component affecting perceived efficacy, consistent with current literature that underscores the significance of acceptance in the perceived effectiveness of alternative therapies. Seventy-five percent of participants recognized the presence of adverse societal beliefs concerning video games, underscoring the necessity to confront these stereotypes to promote enhanced acceptance. Government activities designed to normalize video games for therapeutic and educational applications are pertinent and significant, advancing a comprehensive vision for mental health enhancement inside the country. This study encourages social professionals to advocate for video game treatment, transforming cultural narratives and enhancing understanding of its advantages. Furthermore, it underscores the imperative for continued investigation into the long-term impacts of video game therapy and its relevance across various demographics, advocating for a transformation in clinical methodologies that incorporate technology-based strategies to improve mental health and promote positive character development in both children and adults.

6. Conclusion

This study emphasizes the promise of Video Game Therapy (VGT) as a novel and efficacious method to improve mental health and foster positive character development in clinical social work, especially within the setting of Saudi Arabia. The results demonstrate a substantial association between the acceptance of VGT and its perceived efficacy, highlighting that increased acceptance correlates with enhanced perceived effectiveness in improving mental health outcomes for both children and adults. The significant interest expressed by participants, especially parents, demonstrates a willingness to adopt VGT as a beneficial therapeutic instrument, notwithstanding prevailing cultural prejudices and misconceptions about video gaming. This acceptance, along with the results from the regression analysis, highlights the importance of informing stakeholders about the advantages of VGT and promoting its incorporation into clinical practices.

Furthermore, the research indicates that rectifying social beliefs and misconceptions regarding video games may further improve the adoption and application of VGT in therapeutic contexts. The Saudi government's endeavours to advance digital gaming in therapeutic settings offer a promising foundation for the future implementation of VGT in social work. Hence, VGT offers a comprehensive strategy that matches with contemporary client preferences while promoting emotional exploration, cognitive skill enhancement, and social engagement. By utilizing the captivating qualities of video games, social workers can provide a more holistic therapy strategy that appeals to both children and adults, thereby enhancing mental health and well-being within the community. Subsequent research ought to persist in examining the applicability and efficacy of VGT, so further substantiating its status as a credible therapeutic intervention in mental health practices.

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