THEORETICAL BACKGROUND
SOP 1

The social side of gaming: How playing online computer games creates online and offline social support

Online gaming has gained millions of users around the globe, which have been shown to virtually connect, to befriend, and to accumulate online social capital. Today, as online gaming has become a major leisure time activity, it seems worthwhile asking for the underlying factors of online social capital acquisition and whether online social capital increases offline social support. In the present study, we proposed that the online game players' physical and social proximity as well as their mutual familiarity influence bridging and bonding social capital. Physical proximity was predicted to positively influence bonding social capital online. Social proximity and familiarity were hypothesized to foster both online bridging and bonding social capital. Additionally, we hypothesized that both social capital dimensions are positively related to offline social support. (Trepete, Reinecke, Juechems 2012)

The Effect of Online Gaming, Cognition and Feedback Type in Facilitating Delayed Achievement of Different Learning Objectives

Online and computer-based instructional gaming is becoming a viable instructional strategy at all levels of education. The purpose of this study was to examine the effect of (a) gaming, (b) gaming plus embedded questions, and (c) gaming plus questions plus feedback on delayed retention of different types of educational objectives for students identified as field dependent/field independent. (Cameron, Dwyer 2005)

Online Gaming Addiction: The Role of Sensation Seeking, Self-Control, Neuroticism, Aggression, State Anxiety, and Trait Anxiety

Research into online gaming has steadily increased over the last decade, although relatively little research has examined the relationship between online gaming addiction and

personality factors. This study examined the relationship between a number of personality traits (sensation seeking, self-control, aggression, neuroticism, state anxiety, and trait anxiety) and online gaming addiction. (Mehroofs, Griffiths 2010)

A Study of Time Management: The Correlation between Video Game Usage and Academic Performance Markers

This study analyzes the correlation between video game usage and academic performance. Scholastic Aptitude Test (SAT) and grade-point average (GPA) scores were used to gauge academic performance. The amount of time a student spends playing video games has a negative correlation with students' GPA and SAT scores. As video game usage increases, GPA and SAT scores decrease. A chi-squared analysis found a p value for video game usage and GPA was greater than a 95% confidence level ($0.005 < p < 0.01$). This finding suggests that dependence exists. SAT score and video game usage also returned a p value that was significant ($0.01 < p < 0.05$). Chi-squared results were not significant when comparing time spent studying and an individual's SAT score. The effects of video games may be cumulative; however, drawing a conclusion is difficult because SAT scores represent a measure of general knowledge. GPA versus video games is more reliable because both involve a continuous measurement of engaged activity and performance. The connection remains difficult because of the complex nature of student life and academic performance. Also, video game usage may simply be a function of specific personality types and characteristics. (Anand 2007)

Consequences of Play: A Systematic Review of the Effects of Online Gaming

Massively Multiplayer Online Games (MMOGs) have received considerable attention in news headlines describing gamers who have died while engaging in excessive play. However, more common physical and psychosocial effects attributed to online video gaming are social isolation, increased aggression, and negative academic and occupational consequences. In consideration of the bias in reporting negative consequences of video gaming, a systematic review was conducted to evaluate the evidence of the effects of MMOGs on those who play them. In the sixteen studies that met the inclusion criteria, analysis revealed that only those players who were classified as “addicted” or engaged in “problematic game play” experienced

significant negative consequences, with many gamers finding positive aspects to video gaming such as enjoyment, feelings of achievement, friendship, and a sense of community. However, significant limitations in the studies point to the need for further research so that appropriate treatments and interventions can be developed for problematic game play. (Sublette, Mullan 2012)

SOP 2

Leveraging online gaming for teaching student leadership and teamwork

Within the college classroom, many skills are difficult to simulate effectively. Online gaming may provide a rich environment for students to learn effective leadership and teamwork. This paper discusses the organizational difficulties of setting up such a simulation, as well as providing a preliminary conceptual framework for instructors to consider when implementing an online game simulation in their classes. The paper concludes with suggestions for encouraging students to apply the concepts they learned in the online world to their actual teams. (Gorlinsky, Serva 2009)

Falling in love with online games: The uses and gratifications perspective

Playing online games is experience-oriented but few studies have explored the user's initial (trial) reaction to game playing and how this further influences a player's behavior. Drawing upon the Uses and Gratifications theory, we investigated players' multiple gratifications for playing (i.e. achievement, enjoyment and social interaction) and their experience with the service mechanisms offered after they had played an online game. This study explores the important antecedents of players' proactive "stickiness" to a specific online game and examines the relationships among these antecedents. The results show that both the gratifications and service mechanisms significantly affect a player's continued motivation to play, which is crucial to a player's proactive stickiness to an online game.(Wu,Wang, Tsai 2010)

Negative facts about gaming

Although, there are many advantages of playing video games, i.e. positive facts, there are also disadvantages or rather negative facts of playing video games, especially, violent video games for which the majority of players are addicted to. (Hafner, 2003).According to researchers at Indiana University School of Medicine, violent video games directly altered brain activity in the frontal brain region which was associated with emotional control and cognitive function. The affected brain regions were important for controlling emotions and aggressive behavior (Quittner, 1999).According to psychologists and researchers, video games can change personality as well as the mentality of the player. Some researchers argue that non-violent games would have been the focus of the study if they demanded quick reflexes and pinpointed accuracy. In this research, it is clearly seen that games encouraged obsessive behavior and robbed boys' time (which is valuable) which they should have spent for their studies, sports and extra-curricular activities(Hafner, 2003). At the same time, video games robbed players, the time they should have spend with their families and devoted for social relationships with their peers and relations. Violentvideo games also resulted in aggressive behavior, especially, in kids and youths (Quittner, 1999).

Many disadvantages of playing video games include players' health being seriously affected also, as gamers become lazy and neglect doing exercise, eating healthy and nutritious food because they sit in front of a screen for hours when they are playing. Video games can also affect the mental health of gamers as playing requires their attention, and leads to a reduced contact with the environment around, which can also lead to a lack of interest in daily activities and hobbies. Meanwhile, spending many hours in front of a screen will result in less social interaction which can cause social problems and gamers will tend to become introvert.According to research, excessive playing of video games will stunt the growth of a human brain too, although, there are games that can stimulate brain activity in both the left and right hemispheres of the frontal lobe. The frontal lobe of the brain is associated with learning, memory and emotion and continues to develop till the age of 20. This raises a level of concern as brain development is imperative during those crucial years (Quittner, 1999).

Positive facts about gaming

During the past several years, researchers have examined the psychological effects of certain video games which carry potential benefits such as boosting mental function as well as

improving vision and memory. Research has also indicated that fast-paced games have resulted in boosting visual acuity and spatial perception, whereas strategy-based games can improve cognitive skills and reasoning (Anthes 2009).

Researchers C. Shawn Green (Assistant Professor, University of Rochester) andDaphne Bavalier, (Research Professor, University of Geneva, Switzerland) pitted computer games against people who never played such games for psychological tests to examine their basic visual skills, where shapes of circles were matched on two sides of the screen randomly. In this test, keen players showed more efficiency following the “attention blink” which showed how easy it was to capture someone’s attention. The results indicated that playing video games enhanced their capacity of visual attention than those who did not play such games (Anthes2009).

Patricia Greenfield, a psychologist tested how to solve problems using hypothesis and decoding puzzles, and studied the relationship between video games and intelligence which has a positive correlation. The research showed an increase in worldwide nonverbal IQ levels (use of icons for problem solving and the ability to understand certain things from multiple viewpoints), even though it was at the expense of more important social skills in the real world (Quittner, 1999).

Playing video games increases the reflexes in individuals and playing them on a regular basis can react to a stimulus in a much faster and sharper manner (of players) in comparison to those who do not play (Anthes 2009).

According to some experts, video games improve many skills in players such as gaining self-confidence. At the same time, as many games are based on history and governance, they indirectly teach kids about many aspects of life (Anthes 2009).Meanwhile , video games also teach players many skills such as motivation, problem solving and cognitive skills and also encourage them to strive and reach more difficult levels presenting challenges at each stage (Quittner, 1999).