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**Electronic Games: A Legitimate Diversional Therapy Intervention  
for Health Care Consumers?**

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## **Introduction**

Much has been written about the negative effects of electronic games and game playing on society. Some of the issues that have attracted the most attention include the negative effects of playing on user violence (Gentile and Stone, 2005), the social development of children (Chambers and Ascione, 1987) and physical health (Vandewater, Shim and Caplovitz, 2004). The overriding criticism is that games divert consumer leisure time from more “healthy” pursuits. However, academic research has produced inconclusive evidence of the effects on players, with some researchers highlighting the positive outcomes from play (e.g., Baranowski *et al.*, 2003; Gros, 2003). Indeed, these positive aspects and the fact that games can divert attention may mean that they offer great promise as a therapeutic tool, particularly as a form of diversional therapy. In this paper, we argue that gaming, far from being an activity that should be criticised by social marketers, is an activity that can have clear therapeutic benefits to society.

## **Diversional Therapy Defined**

Diversional therapy falls loosely under the broader heading of occupational therapy. However, while occupational therapists align more closely with the medical field, diversional therapists lean towards a social model of care. Diversional therapy is defined by the Diversional Therapy Association Australia National Council (DTAANC, 2007, p.1) as “... (working) with individuals of all ages to optimise their leisure involvement and experience”. It seeks to improve the quality of life of individuals through leisure and recreation.

Diversional therapists operate in a variety of health care settings and deliver services to diverse health care consumers, including the elderly, the disabled, those suffering mental illness and patients in palliative care. Of course, the target market dictates the services provided, but interventions may include music, exercise, discussion groups, board games, art and craft, animal-assisted therapy and meditation, among other activities. The primary goal of the diversional therapist is to facilitate, co-ordinate and plan leisure and recreational programs that “... support, challenge and enhance the psychological, social, emotional, spiritual, cognitive and physical well-being of individuals” (DTAANC, 2007, p.1). We propose that electronic games may be an appropriate intervention to achieve these outcomes.

## **What Electronic Games May Offer**

Electronic games are designed to engage players in an inherently enjoyable form of entertainment, with studies linking game play to physiological arousal and affective experience (e.g., Anderson and Bushman, 2001; Koepp *et al.*, 1998). People play to escape reality, relieve boredom, ease stress and have fun (Youn and Lee, 2003). Further, games allow users to build on, maintain, or experience dreams and realize fantasies (Shapiro and McDonald, 1992) that may not be possible in real life.

Key problems faced by patients who are hospitalised for extended periods of time include boredom, stress and depression (Radziewicz and Schneider, 1992). These negative states can impede recovery and lead patients to report symptoms more frequently (Somers and Vodanovich, 2000). Diversional activities help reduce anxiety levels, ease pain and assist patients to cope (Radziewicz and Schneider, 1992). The characteristics of the game medium may provide an advantage here: games are interactive and vivid, making them capable of focusing users’ attention. Gamers commonly report deep involvement with games (Johnson and Wiles, 2003), whereby they can become so absorbed by the activity, that they feel removed from their immediate environment (Molesworth, 2006). Games can facilitate

sensory immersion and a sense of “presence” in the environment, so they may offer an escape and serve as a distraction from painful procedures and treatments.

Electronic games also encourage social interaction. Indeed, this is a key reason why people play (Lazzaro, 2004). Social interaction is important for patients, because in its absence, patients may become preoccupied with their own thoughts, more sensitive to their pain, and demonstrate lower self-esteem, as well as life satisfaction (Zgola, 1987). Ultimately, increased depression can result from social isolation (Tarzi *et al.*, 2001). Most at risk are patients suffering immune deficiencies (e.g., immunocompromised cancer or leukaemia patients) and the elderly (Erber, 1994), but other patients may also have inadequate opportunities for socializing due to a lack of common space in health care settings (Lee *et al.*, 2003). Games may offer an opportunity for electronically mediated communication through play, particularly in the case of multiplayer online games. There are a variety of different formats across different platforms (e.g., consoles played via a television, handheld devices, online and computer games), allowing the diversional therapist to cater to a variety of therapy situations.

Another important goal of diversional therapy is to promote physical activity amongst patients (Lee *et al.*, 2003). A key challenge is encouraging this activity in the absence of the therapist. In their investigation of stroke patients, Ada *et al.* (1999) found that most physical activity occurs under supervision, but when alone, nearly two-thirds of patient time is spent being inactive. Electronic games offer an opportunity, as they can easily be played without supervision and different games may be adopted that vary in the level of mental processes and physical effort required to play. Studies demonstrate that games can have a metabolic and physiological impact (e.g., Wang and Perry, 2006), because playing demands not only visual attention, but also motor actions. Outcomes may include increased mental rotation (De Lisi and Wolford, 2002); enhanced visual skills (Dorval and Pepin, 1986); and improved eye-hand coordination and reaction time (Griffith *et al.*, 1983). More active games (i.e., exer-games) can increase energy expenditure and heart rate to similar levels achieved from other forms of physical activity (e.g., jogging) (Mellecker and McManus, 2008). Even individuals suffering spinal injuries can experience aerobic training effects from playing (Widman, McDonald and Abresch, 2006).

### **The Need for Research**

Empirical studies in both the medical and social science fields are needed to explore whether electronic games can produce beneficial outcomes for diversional therapy patients. Specifically, we raise the question: How effective are electronic games at achieving psychological, social, emotional, spiritual, cognitive and physical outcomes for diversional therapy consumers vis-a-vis other interventions?

Government policies and campaigns increasingly recognise that factors beyond medical treatment are necessary for the well-being of the population. Diversional therapists face increasing pressure to deliver high quality service, demonstrated by research evidence of client outcomes (Pegg and Darcy, 2007). Consumer complaints concerning facilities and services offered by leisure and recreation providers, including diversional therapists (Pegg and Darcy, 2007) has only reinforced this need. Diversional therapists also tend to be undervalued professionally (Stumbo, Martin and Osborne, 2004), providing a further impetus for the demonstration of their worth through consumer research. All of these factors are creating a need to find and prove new interventions. We make a contribution here by identifying one such intervention worthy of study.

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