

# THE POSITIVE EFFECT OF PLAYING VIOLENT GAMES ON CHILDREN'S SELF-REGULATION LEARNING

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## ABSTRACT

This paper aims to generally give an insight about the positive contribution of the violent arousal through playing violent games on the children's Self-Regulation Learning (SRL). A short case study, which helped us to state the basis for the design of our next robust survey, has been achieved and the results showed that the violent arousal has a great contribution to the children's SRL. Despite, it was only one short experiment with two of the first author's children aged less than 7 years young, the results were highly motivated us to introduce our hypothesis and that is our main message.

## KEYWORDS

Self-Regulation Learning (SRL); Self-Monitoring; Violent Arousal; Learning Settings; Arousal Learning; Arousal Learners;

## 1. INTRODUCTION

Until now, playing the violent games is still considering as double-edged sword. On one edge, the focus is on the aspect of using them in teaching and social settings and improving human-computer interfaces (e.g. DE AGUILERA & MÉNDIZ, 2003; Lee et al, 2004; Fisch, 2005; Amory et al. 1999; Ju and Wagner 1997; Malone 1981; Durkin and Barber 2002; Day et al. 2001; Al Mahmud et al, 2007; Grønbaek et al, 2007 and Metaxas et al, 2005; Johnson and Wiles 2003; Pausch et al. 1994). On the other edge, the focus is on the negative outcomes and later effects (e.g. Griffiths and Hunt 1998; Anderson and Bushman 2001; Sherry 2001); and other different aspects (e.g. Higuchi et al. 2005; Vandewater et al. 2004; Smith et al. 2003; Dietz 1998; Norris 2004; Gottschalk 1995). Briefly, the problem is that the gamers are always playing against the rules. Therefore, a number of several studies tried to conceptualize the behavioral properties of games (e.g. Aarseth et al. 2003; Järvinen 2003; Juul 2003; Klabbers 2003). Other studies have examined another aspects such as the demographic, personality factors, motor functions and methodological tools (e.g. Griffiths et al. 2003; Griffiths and Dancaster 1995; McClure and Mears 1984; Castel et al. 2005; Donchin 1995; Washburn 2003). Nowadays, millions of people are engaging in multi-user gaming environments like MMOGs (Ducheneaut et al., 2005; Griffiths, Davies, & Chappell, 2003; Griffiths et al., 2004; Woodcock, 2006; Yee, 2006). (Agina, 2006) reported out that "it is seldom to find an Internet Coffee in Tripoli without children. Interestingly enough, the best games the children prefer are The Punisher and Doom-3". Accordingly, it is a question that why children prefer to play the violent games? We may state many reasons but eventually there will be one answer is that children do not only feel but also 'taste' the arousal when they play violent games. Consequentially, it is a goal to find out why children do not feel and taste arousal in their learning settings and why do not transfer this kind of violent arousal to their learning settings to make them not only excited but also ultra violent arousal-learners! From a psychological point of view, it is a disappointing to find this lack in the literature concerning studying the contribution and effect of the violent arousal on the children's

SRL. Fortunately, the negative outcomes of gaming is commonly reported (e.g. Piper et al., 2006; Dillon et al., 2006; Sehaba and Estrailier, 2006; Bernhaupt et al., 2007; Svoen, 2007; Ravaja et al., 2007) and there are several theoretical models that not only describe and explain but also predict the aggressive behaviour (e.g. Berkowitz's cognitive-neoassociation theory; Zillman's excitation transfer theory; Huesmann's script theory). But, unfortunately there is no yet such a model that focuses on the positive contribution and effect of the violent arousal to children's SRL, which is not only motivated but also challenged because there is an obvious contradiction between what the researchers believe about the violent arousal and the ultimate goal of SRL. Precisely, most of the gaming researchers believe that playing in cooperation with another player is greatly effecting arousal, where the effects, per se, can be drastically impacted when the player knows that the other object on the screen is physically controlled by a human, which means including external controls for arousal by a human is the only way to control the arousal. Clearly, this makes a significant 'collision' with the ultimate goal of SRL, which is minimizing the external control!

## 1.1 What is Self-Regulation Learning?

Agina and Kommers (2007-In Press) pointed out that "Each definition of Self-Regulation in each area of knowledge has been introduced based on the researcher's background and perspective. In philosophy the definition was based on Self-Control (Shonkoff and Phillips, 2000), in psychology the definition was based on Self-Management (Stright et al, 2001), in cognitive science the definition was based on Self-Generated (Zimmerman and Schunk, 1989) and in motivational learning the definition was based on Self-Motivation (Boekaerts, 1999)... Based on our current research concerning the contribution of private speech to children's SRL at early age, we could simply introduce our definition of Self-Regulation based on two main aspects, which are self-monitoring and self-directed as following: The Self-Regulation Learning is the learners' ability to direct their verbalization process and, simultaneously, monitoring their learning process's goals". Accordingly, our definition of Self-Monitoring *is the learners' ability to perceive their learning goals and monitoring their learning processes during the progression.*

## 2. THE PARTICIPANTS, STIMULUS MATERIALS AND PROCEDURE

"It's high time we stop listening to the "experts" and start paying closer attention to our kids. They seem to be the only ones with a clue" (Jones, 2002). The participants are the first author's daughter and son aged 7 and 5 years young respectively. Both are experienced the computer use when their age was 3 years young. Three different stimulus materials have been used where the first was the violent game *The Punisher*, the second and third were *The Microsoft Paint* and *The Child-Calculator*. The participants are so familiar with the second and third materials and they use the computer approximately 3 hours per week at home besides their school while this will be the first time for them to experience *The Punisher*. The procedure was divided into two days. At the first day, each participant was giving 60 minutes playing *The Punisher* and at the second day each one has been asked to choose the preferable tool to play along 60 minutes.

### 2.1 The Results

#### 2.1.1 The Effect of the Game Hero's Gender on the Player's Self-Monitoring

Interestingly enough, the participants have been affected by the gender of the game's hero. The most remarkable verbalization from the girl "*I do not like The Punisher because of too much killing... I prefer to do my tasks with Child-Calculator... My calculator has no blood and I can solve a lot of tasks*" And from the boy "*I will kill all the criminals but I do not know how I can use this weapon... I like Paint because I can draw other weapons... I like numbers but I do not understand all of them*" Remarkably, after finishing the experiment the boy was trying to mimic the hero and as he said "*These are my weapons and I am looking for the criminals*" and tried to 'attack' me and his mother too! The participants were also comparing *The Punisher* with their preferable heroes (Spiderman and Bat-woman) and the most important consideration is regarding the girl: *why she refused to play the Punisher? Is it really because of too much killing?*

(A) The acquired amount of the aggressive behaviour through playing violent games is positively or negatively affecting by the identical gender between the player and the hero of the game.

### 2.1.2 The Effect of the Violent Arousal on Self-Monitoring

Although, it is a problem that the boy has been quickly acquired and transferred the violent arousal into reality, the most significant conclusion is that he becomes more aware about the difference between good and bad people “*I must fight the criminals*”. Therefore, the boy was aware about the number of the bullets during playing, which means he was monitoring the process, which is in fact what so-called *Discovery Learning* that requires the learner to be self-monitoring already. It is worth to ask *why do not transfer this violent arousal into children’s learning settings where they can become arousal-learners (i.e. Arousal Learning!)*.

(B) The violent arousal could be positively and more than negatively supporting the aggressive behaviour but it is fully positive-supportive for the children’s Self-Monitoring.

### 2.1.3 The Effect of Engaging the Children’s as Design-Partners on Self-Monitoring

Both children have been asked how they can help The Punisher to ‘deliver’ the criminals to the police instead of killing them. Eventually, they came up with an idea is that “*Firstly, we should remove all the weapons to stop killing... The hero should catch the criminals by hand... We can do that by Paint... We can also use The Child-Calculator to count the criminals... Why there is no police division up there*”

(C).The violent arousal is a continuously-feeling that the children can spontaneously acquire across the time. Thus, it can be easily controlled by engaging them as design partners to minimize their aggressive behavior and maximize their Self-Monitoring.

## 3. THE CONCLUSION AND RECOMMENDATIONS

The most important conclusion is that: *the violent arousal has positive effects on the children’s SRL in many aspects especially on the aspect of Self-Monitoring*, which is our hypothesis in our next work. Accordingly, we would strongly invite all the researchers to join us and working on this subject especially with children at early age. Therefore, we are also strongly recommending the following questions to be taken into account:

- *Does the violent arousal have the same impact on all the sub-aspects of SRL? To what extent?*
- *Is it a relationship or an interrelationship between SRL and aggressive behavior?*
- *How can the violent arousal be transferred into the children’s learning settings? By other words: is there something that we can call it ‘Arousal-Learning’ and ‘Arousal Learning Tools’?*

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