

A Personalized Intervention Program to a Child with Asperger Syndrome Addicted to Computer Gaming

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Abstract

According to the international literature, it is an indisputable fact that some children result in addiction to virtual reality and certainly to dangerous ramifications by the unhindered use of the internet or electronic gaming. Our individualized educational intervention is a behavioural type program and it lasted intensively for three consecutive years. Its aim is to improve the child's social-emotional condition, through early removal of the video games and the internet. Our research is a case study of a high-functioning autistic child (Syndrome Asperger), who was depended on electronic game. The methodology was based on the "method of gradual replacement" of the time the child-subject of the research dedicate on role-playing games with role plays through constructive narrative intervention. The result of our research shows that the child was developing his self- confidence, and he also discovered himself gradually and was liberated by his dependence. To sum up, the invaluable tools should be adopted as well as the educational methods in Special Education so that any dependence is prevented.

Keywords

Syndrome Asperger, Individualized Educational Program, Narrative Intervention, Electronic Games Removal

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1. Introduction

According to the theoretical data, through the use of online games-roles the value of communication with the environment is reduced for the child. Consequently he tends to isolation environment and blocking and his occupation with virtual environment decreases his effort to hang out with others and to invest in his social relations.

The autistic child whose socio-emotional state is his weakness, because of the decreased social skills, is empowered by the online power and develops a dependence bond from the internet.

A lack of communication is noticed, becomes introverted, selfish concentration difficulties and learning difficulties. In 1964, the World Health Organization (WHO) Expert

Committee introduced the term 'dependence' to replace the terms 'addiction' and 'habituation' and familiarly due to negative with these words [26]. Those negative effects influence mostly the social- emotional health and of course, the overall development of the kids. They end up serious and dangerous by the dependence formation. That danger is quite severe since the appearance of electronic dependence (of addiction syndrome) is obvious.

There have been important surveys on that field which are mentioned below: Prevention of dependence on computer games among primary school children [16]. Computer game addiction and emotional dependence [22]. The relationship between online game addiction and aggression, self – control and narcissistic personality traits [12]. Pathological dependency: Distinguishing functional from emotional dependency [3]. The effects of violent video game habits on

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adolescent hostility, aggressive behaviors, and school performance [8]. Effects of different play structures on social interactions between a boy with Asperger's syndrome and his peers [15]. Video game violence: A review of the empirical literature [5]. Home video game playing in schoolchildren: a study of incidence and patterns of play [21]. How computers have changed the wage structure: Evidence from micro data, 1984-1989 [13]. Identifying video game addiction in children and adolescents [7].

The factor of self confidence of these people is the one that can predict the use of the net [2], so the people who have inadequate self confidence (such as the autistic child) have an important factor of their personality that affects them related to the issue of excessive use of the internet. According to scientific research the most sensitive ages of children are 6-9 years old. One type of addictive behavior is Video Games. It is estimated that there are more than twenty million electronic games. The use of the term video game became wide and ended up meaning all types of screen, figures and platforms.

The most exciting version of electronic games are role-playing games which in contrast to real games they cause a weakness to the child to create his own story, and by getting rules and roles that are already programmed in the game, the child is trapped in already existing choices. As a result, the process of absorbing social roles by the child, who is unformed as far as such properties are concerned, is distorted and instead of tending to friendliness, clarity desire to communicate and compassion, the child tends to increased aggressiveness and antisocial behavior.

Any kind of electronic and online games replace reality with virtual reality where the child-player becomes slave (as the image does not allow him/her to think) sell out an important part of his freedom and respectively the child loses his skill to defend and resist and so he/she becomes isolated from the social environment and gradually develops as a socially inactive person without any social position.

There is the view that violent behaviours are adopted by the kids because they want to imitate the hero of the game and to become a model of success (the image of the powerful) through violent and offensive behaviour. The child, observing the hero to become better and more powerful by using violence and lawless behaviour, believes that when imitating his hero, he will obtain the same results. The child-player coming back to the real world feels powerless, minor and vulnerable in hostile environment.

To sum up, the harsh influences from the electronic dependence on the child, focus on *his/her mental development* (memory, thought, imagination, perception, flexibility in the thinking development, creativity), *his*

empathic which is in very low levels and *his social-emotional development* (insistence, patience, right attitude to uncertainly, ability of adaptation to the changing environmental conditions and the society demands in stressful situations, the ability to accept new ideas and change and his communicative skills). The electronic media can affect learning and social behaviour, replacing activities such as reading (studying), family relationships and social game with peers [10].

It is also observed that weak self control and discipline, weak control of emotions especially for a disabled child. A symptom of electronic dependence is also absence of alternative activities such as sport activities, music, social and friend affairs.

The Asperger Syndrome is a sub-category of wide range of Extensive Development Disorders, according to the official global diagnostic manual DSM-V [1]. The children who belong to that syndrome have high functionality (without meaning that the need for educational interference is reduced) so for this reason they are more aware of their specification and for that reason they develop complex problems in education as well as in everyday life [19]. Though, having the right support they are absolutely capable of leading a complete and independent life. The difficulties they face are in three fields, the known "triplet of disorders": Social interaction, social communication and social imagination.

2. The Subject of Our Study

The subject of our research is the case of A, an autistic child of high functionality (Asperger Syndrome) who in the beginning of the educational intervention was a 3rd grade student and in an electronic dependence condition. Our educational intervention lasted intensively three years. The A's addiction had to do with his occupation with any electronic game on the P.C. as well as on special platforms that had become his goal. As a result the value of communication had been eliminated for A, who became isolated from his environment and developed violent and antisocial behaviour. A is the second and last child of greek family. The scientific diagnosis of the appropriate and official center was given during A's preschool age, and he was diagnosed with Asperger Syndrome so, from then on he attends a habilitation class. Unfortunately the materialistic security and the unique rewards and presents from his parents and relatives (who did not know the consequences) had to do with electronic stuff, such as video games, play-station and various consoles of fifth generation of electronic games and moreover the provision of the absolute freedom as far as the use of the net just for safe game is concerned. Furthermore,

in cancellation cases, his parents resorted to screens in order to avoid his reaction and to calm him down. With his highly mental power, A managed to handle his parents so that, when he finished his homework successfully he could stay in front of screens for hours without supervision as his parents did not know the consequences of these games and because of their sensitivity towards his specialty, allowed him the overuse and their supervision during the use of the P.C. was inadequate. So, electronic games had replaced the function of real relationships.

2.1. The Program of Our Educational Intervention

Our educational assessment preceded our educational intervention. A, as a result of his syndrome had lack as far as the social- emotional field is concerned resulting in inadequate social skills. Self confidence, as a primary characteristic of social-emotional development represents the emotional side of self and refers to the global view that someone has of his value as a person. Low self- confidence is linked with emotional disorder [17], consequently, the development of positive self –confidence in children prevents psychological and behaviour problems [6].

Our individualized behaviour intervention took place in the family environment. During the whole searching intervention people of the social environment of the child were involved. We applied a stable and organized program in the educational intervention using visual systems such as calendars, control lists, images and notes so that the child was guided and the communication with him was facilitated.

2.2. Aim and Goals

Our aim in general was for A to be independent obtaining the ability to stay away and keep a judgmental attitude towards electronic stimuli and not their complete rejection. So, we focused exactly on the development of social- emotional skills of A, which we analyzed into allocated goals as:

1. Self- confidence of development
2. Taking responsibility
3. Keeping priorities
4. Pursuit of occupation out of the internet- counter proposals
5. Acceptance of limits
6. Recognition and processing of emotional needs
7. Expression or handling of emotions
8. Improvement of interpersonal relationships
9. Self- image improvement.

2.3. Methodology

The methodology we used is individualized intervention of behavioral type with amplifiers and rewards so that the child becomes independent and familiar with naturalistic conditions in a secure climate of friendly mood and cooperation. As A commands high intelligence and abilities but lacks in communication he surely does not have the model of behaviour and for that reason we treated his behavioural problems with the method of behaviour modification because of its theoretical founding and efficiency.

Our educational intervention was based on the “*method of gradual replacement*” of the time the child dedicates-subject of the research on role-playing games with role plays through constructive narrative intervention for his social –emotional health and development. At the same time, there was consulting intervention on his parents so that the intervention lines would converge on the same goals.

More analytically, about the goals of taking responsibility, accepting limits and recognition and processing of emotions, we promoted his behaviour by applying the chained connection through positive encouragement (boost) and we rewarded the combination of other abilities until all behavioral sequences are incorporated in one full sequence. Our help was withdrawn after the creation of this behavioural chain.

We ranked the stages and methods we followed as:

1) We encouraged A without time delay after the appearance of the pursued- desirable behaviour so that the new behaviour will be rapidly developed. On the contrary, for the preservation of the already formed or existing behaviour we empowered in stable periods. So, we made clear his positive characteristics, we praised him in case of positive behaviour, we encouraged and amplified his powerful points and relying on that we developed in self confidence.

2) We also used the method of behaviour formation with a sequential approach of behaviour – target. Initially with continuous encouragement of related behaviours but remote from the target behaviour and in the course by amplifying similar behaviours to the target behaviour.

2.4. Research and Tools

We developed narratively the *Constructive Model* of Vladimir Propp, for the folk tale as a research tool, and we applied in psychodrama as a means of finding knowledge, and the procedure of inner change of A, as the method of psychodrama, which is based on role play pursues narration and in our case, acting of psychological conflicts of A, and

allows the penetration of logic through speech¹. We used greek folk tales². By implementing the psychoanalytical model of human personality, the tales transfer important messages to the conscious, the pre-conscious and the unconscious, to any level operates in the particular phase, each of these psychological dimensions.

Especially when they negotiate, problems that occupy the child brain, talk to the future ego and encourage his development, while at the same time relieve from pre-conscious and unconscious pressures.

As the folktale story is developed, the pressures of that are incarnated and allow their recognition and show ways to the satisfaction of pressures and difficulties of the child which are identified with the demands of Ego and Superego. Consequently, through tale narration (the elaborate plot and the conflicts that are raised), catharsis is succeeded and the exhaustion of bad psychological situation and problems for the child and the ways of facing them [24].

2.5. The Procedure of Our Intervention

Our intervention was realized in two parallel phases:

A) In the 1st phase we narrated chosen folk tales and in the 2nd phase we urged A to create his own narration with a goal to investigate and express his feelings. Through the narrations we presented various situations to A and passed messages that he could process and absorb better, so that he could act in a respective way in similar situations in conditions which would be difficult and unexpected.

According to the methodology of Special Treatment and Education it is suggested an intervention plan with targeted activities of psychokinetic and emotional organization through symbolic dramatized tale [18]. The images and sounds of electronic games were replaced gradually through narration with images, that the child himself was creating intelligibly and adapted his needs and skills, and as a result started thinking.

B) Our role in the 2nd phase was limited in the co-ordination of his narrative efforts as well as in guidance, so that he would not decline from the syntactical organization of his functions and of course the recording of narrative efforts, to which he resorted and studied. Our intervention was completed in the scheme below. In the 1st year of our intervention, our sessions were three times a week for 40' and was split in two phases. For the next two years the

sessions were two a week for 30' split into two research phases.

1) In parallel, we amplified focusing and bordering behaviour. So, we set limits with consistency, logic, quickly and simply. During the whole intervention we tried to have continuous eye contact, so that we could bring him to order again using a look or messages (body movements, touching etc.) As for punishment we chose deprivation of privileges.

2) The family participation in every step of this intervention was determinative for the successful implementation of it, as parents know better the needs, desires and whichever specialized of A. At the same time there was regular assessment for the preservation of vested goals and their record.

3. Results

By assessing our educational intervention, we realized the maturing development and self-confidence of A, who, through psychodrama from experiencing dramatic versions and the sharpening of his psychological sensitivity and intelligence, he discovered himself gradually and was liberated by the dependence encircling. The combination of his structural model Propp in psychodrama reassures the catalytic psychosocial influence of narration on A. As it is clear in the *table 1* below, the majority of our initial goals were made true. His social skills were amplified and the problematic conditions became understandable and predictable. At the same time, by identifying himself with the hero of the story, he controls his behaviour and “corresponds” to his life. He learnt the various types of moral behaviour such as how to avoid reacting stimuli that could psychologically strain him (passive avoidance), by experiencing through the tale the stress of punishment, immoral behaviour of any acting person. He also started imitating the choices and actions of the acting people, to follow their example and act respectively in specific situations, while, at the same time he learnt how to discriminate right from wrong effectively, the dangerous from the safe and what to avoid and what not. Furthermore, his parents became even more powerful in their parental role and redefined and built their relationship with A on new bases.

They learnt how to handle all the situations in everyday routine, while, at the same time, started creating together, having fun, organizing problem, solving activities, observation activities, imitation activities and activities of synchronism and powerful interaction. It has been proven that when mothers set limits, they are effective in decreasing the child's time in front of T.V. [25].

1 The Constructive Model of Propp was applied successfully by Greimas, A in analytical psychodrama and was assured the universality of the model – as well as its powerful applications (see Safouan, M. research with title: “*Reflexions sur le psychodrama analytique*” *Bulletin de psychologie* 30/11/1963), the psychodramatic treatment was applied as practice on a child with severe psychological problems, to promote the gradual fulfillment of the narrative model of Propp to its completion [9].

2 The folk tales we used were from the Stavrou, Ek.. collections [24].

Table 1. Effects of research.

GOALS OF EDUCATIONAL INTERVENTION	If achieved	AFTER EDUCATIONAL INTERVENTION
Self- confidence development	✓	The goal was achieved as a result of all our educational intervention
Taking responsibility	✓	It was one of the most difficult goals, though it was achieved in combination with motives
Keeping priorities	✓	The goal was achieved by processing our intervention as A was realizing its necessity
Pursuit of occupation out of the internet-counter proposal	✓	With his parents' help and our essential help, A turned to hagiography painting courses with enthusiasm and to sport activities
Acceptance of limits	✓	Our goal was achieved as A was disorganizing his behaviour
Expressing or handling emotions	✓	Our goal was achieved as A was disorganizing his behaviour
Improvement of interpersonal relationships	✓	It was achieved partly through; there are still some difficulties because of the syndrome
It was achieved partly through; there are still some difficulties because of the syndrome	✓	A managed to adapt his emotional expressions according to social conditions. He also managed to understand express and share his feelings
Self-image improvement	✓	The goal was achieved as a result of the self-confidence development

4. Conclusions

The fundamental elements of folk tale make up the catalytic power; the key to autistic child is the identification of the child with the hero and symbolic language. In tales, the world of spirit and the world of impulse have been inserted and expressed as tales and mythic symbols as wisdom sources [11]. There is a very important educational and teaching value in Special Treatment Education. More analytically:

A) The identification of the child with the hero of the story allows him to recognize, learn and try various ways of solving his inner conflicts, takes up his role and passes through the stages of a row of ordeals. The psychodynamic dramatisation has a mainly liberating character as well as purifying. It leads the child to his subjunctive world with authenticity and acceptance, so that he creates contact with himself, obtain right emotional experience and regain the power to think. Consequently, the hero of every tale operates as model showing the child the way to independence socialization and final success. The hero of every tale shows the way to independence, socialization and success at "this moral value which is the result of the tale charm, in the way it reveals our inner nature with countless moral psychological and mental abilities. It is the pursuit for the meaning of life" [4].

The fairy tales do not only introduce the child to the history of literature text but also to his personal story, so that they make up excellent mental food [20], as they are understood and taken in his memory and the message that is passed is amplified and powerful.

B) The tale is timeless and immovable as it talks to the soul of the autistic child who really wants it to last a duration that is not developed, in a time with no history. Through symbolic language (which gives the text new meaning, new concepts, new relationships, the autistic child starts feeling and thinking because the symbols penetrate the deeper unconscious right at the point where his psychological

substance is founded.

The trials of the fairy tale hero are unique functions, which are a mediation joint between negative and positive row of functions³.

In our case, A is widely closed in his ego, there is an exclusion to be in the other's shoes, that it is interpreted as lack of symbolic property and interpretation, lack of some primary matter that was lost during the child's first moments of existence [14]. The symbolic property though, just like in the tales contains opposite schemes (negative and positive pole) that is positive to converge. That is exactly where the weakness of A is, who, even if he has symbolic scheme of opposite poles negative and positive, do not converge. Though, all attitudes and identifications the child's experiences with the acting tale persons and their attitudes are symmetrical to their development grade and respectively does not confuse tale with reality.

To sum up, in a society that is more and more based on its dependence on technology and every type of electronic or online games have become a social and financial necessity that penetrates every aspect of life, every preventive measure has to be taken against the negative consequences of their use on a daily basis.

And of course the invaluable tools should be adopted as well as the educational methods in Special Education so that any dependence is prevented.

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³ According to the syntactical analysis of the tale, the functions of the tale according to the morphological theory of Propp are 31 and are divided into couples in contrast [23].

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