

The Alpha Generation Theoretical Model of Developmental Disorders

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Dictionary:

Theoretical model – is a linguistic object, or more specifically, it is a set of either sentences of a qualitative language (i.e., a language in which terms denoting numbers and other mathematical objects do not occur) or sentences of a mathematical language [60].

Innovative agonology (INNOAGON) – is an applied science dedicated to promotion, prevention, and therapy related to all dimensions of health and the optimization of activities that increase the ability to survive (from micro to macro scales) [58, 59].

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Abstract:

Background and Study Aim: Each generation has attitudes, expectations, behaviours and experiences that are unique to it. The Alpha generation is characterised by widespread access to technology from an early age. Technological proficiency is both their strength and weakness in functioning in society. The overload on the nervous system of the Alpha generation refers to the over-processing of information, which affects their verification of valuable content. Therefore, the aim of this article is The Alpha Generation Theoretical Model of Developmental Disorders.

Material and Methods: This qualitative study uses the method of source material analysis and subjective verification of facts. This provides an in-depth understanding of the problem analysed by referring to an assumed theoretical model encapsulating reality into new knowledge. The results obtained on this basis provide a starting point for further research.

Results: Developmental risks for the Alpha generation were identified as referring to their behaviour, mental and somatic health. Behavioural problems refer to their attention problems and their imitation of violent acts available online and on TV channels. Then, mental problems refer to internet addiction syndrome and anxiety-related disorders. Finally, somatic problems refer to low physical fitness, obesity and postural defects.

Conclusions: The described developmental disorders of today's youngest generation can be put into the theoretical model of developmental disorders of the Alpha generation. It assumes the occurrence of developmental disorders simultaneously in the behavioural, mental and somatic spheres, as possible consequences of inappropriate use of technology.

Keywords: behaviour, education, INNOAGON, mental, somatic

1. Introduction

Each generation has attitudes, expectations, behaviours and experiences that are unique to it.

Viewing humanity's actions at a higher level of generality, it is reasonable to adopt the hypothesis on the supreme value criteria of the global civilisation understood as the survival of humanity and nature in a non-degenerate form with responsibility for the generations to come [1]. Mankind decides the direction of civilisation. Therefore, the use of technology requires respect for the guiding criteria of universal human values relating to contemporary living generations, understood as cohorts born after

the Second World War [2]. In this sense, universal values are manifested by the representatives of generations BB (baby boomers), X (great unknowns), Y (millennials), Z (snowflakes) and Alpha (digital) through the desire to make the world a better place, although the understanding of this task varies from generation to generation [3]. But there is a noticeable crisis of values among the younger generations by shifting the emphasis to tolerance and erasing criticism manifested in the fact that adults should not feel competent to advise young people [4]. So, what can the young contribute to society and what is their responsibility to the older generations? At this point, it is reasonable to assume that relative full knowledge of each generation will only be available when its last representatives have passed away. But certain regularities can be successively proven empirically, thereby expanding knowledge from the micro to the macro scale. To date, knowledge of the Alpha generation refers to children and adolescents up to the age of fourteen [5].

The Alpha generation is considered to be people born between 2011 and 2025 and the overwhelming majority of them are the children of people from generation Y [6]. A characteristic of the Alpha generation is that they grow up alongside smart technology. They have widespread access to it from an early age. Therefore, technological proficiency is both a strength and a weakness of the Alpha generation's functioning in society [7]. The ability to access an almost unlimited amount of information shapes their understanding of the world on a global and local level. Technology is a self-evident part of life for them, which translates into their instinctive switching to ever newer technological solutions. It is a standard of civilisation without which the Alpha generation does not know and cannot imagine life [8]. These are children and adolescents who, from an early age, learn with all sorts of apps and interactive educational games, which translates into their ability to quickly absorb new information, their confidence and openness to new challenges. Through digital interactions, they also develop an awareness of their skills and talents, which can translate into their self-esteem. In theory, the Alpha generation may be the best educated in relation to previous generations [9]. On the other hand, the misuse of technology and unlimited time and content access to the digital world carries a number of risks that may influence the incidence of disorders and diseases among Alpha children and adolescents [10]. In this sense, the overload of the Alpha generation refers to the excess of information they process, both appropriate and inappropriate for their age [11]. Technology is neither good nor bad. Yet, a still open question remains: how is it being used?

The above poses new educational challenges for the parents, teachers and coaches, which are of significant importance to society. Accepting the premise that the older generation is responsible for the upbringing of the younger generation, the rationale of this study is knowledge of the developmental risks for the Alpha generation. It refers to the identification of the negative effects of modern technology use by today's children and adolescents. Accordingly, the aim of the article is The Alpha Generation Theoretical Model of Developmental Disorders.

2. Material and Methods

This thesis is a qualitative research that addresses the relative full understanding of a phenomenon in its natural environment [12]. Therefore, the method of source material analysis, which is widely used in all scientific disciplines [13], was used. It allows the verification of hypotheses based on the results of published work [14]. The method of subjective fact-checking was also used, which refers to the author's own

experience from the perspective of an expert: a scientist, a teacher, and a parent [15]. On this basis, an extended analysis of the available material was carried out through an in-depth understanding of reality referring to the assumed theoretical model and creating new knowledge. The results obtained on this basis provide an entry into further research [16].

3. Results

The Alpha generation shapes their demands according to technological trends and online information, which presents them with behavioural developmental risks [17]. Today's children and adolescents model their behaviour mainly through freelance channels. The trend here is to see shorter and shorter videos with direct messages. In 2024, 15-second videos are fashionable. This translates into short attention spans for the Alpha generation [18]. Their understanding is that access to inappropriate content, including pornography, translates into what is socially acceptable – since there is access to such content, it means it is socially acceptable [19]. This includes films broadcast on television with a lower age category than in the year of release (Table 1).

Table 1. Examples of films broadcast on Polish television with a given age category in 2024.

Film title	Year of release	Age category in the year of release	In 2024 on a Polish free-to-air TV channel	
			Age category	Time of broadcast
<i>Godfather</i>	1972	18	12	8pm
<i>Godfather 2</i>	1974			
<i>Predator</i>	1987			
<i>Best of the best</i>	1989			
<i>Godfather 3</i>	1990			
<i>Predator 2</i>	1990	16	12	8pm
<i>Best of the best 2</i>	1993			
<i>Matrix</i>	1999			
<i>Matrix 2</i>	2003	16	12	8pm
<i>Matrix 3</i>	2003			

What is observed here is the social acceptance of a lowering of the age limit for the reception of violent screen messages [20]. Referring to classical social learning theory, this translates into aggressive behaviour by the Alpha generation [21]. Today's children and adolescents have permission to use the web and media, i.e. they have access to the content there. They observe web and media content, i.e. they can focus their attention on the broadcast behaviour, remember it and try it out in their own actions. In this way, they model their social functioning on the digital content of which they have parental consent [22].

The risk of abusing technology, spending too much time in front of screens, can lead to internet addiction syndrome, which translates into mental developmental risks for the Alpha generation [23]. This addiction is characterised by a strong need to be online

all the time. Long hours of uncontrolled online use can cause anxiety-like disorders among the Alpha generation, which translates into their moods, social and school activities and sleep quality [24].

There are five types of internet addiction syndrome: cyber sexual addiction (compulsive use of pornographic sites); cyber-relationship addiction (compulsive use of social media); net compulsions (compulsive use of online gaming and gambling); information overload (compulsive use of internet feeds); computer addiction (compulsive use of the computer) [25]. At this time, it is difficult to pinpoint the predominant type of Internet addiction syndrome among the Alpha generation. But it is known that the addictive mechanism is the same. First, there is an increase in activity and engagement with modern technology. Over time, a decrease in sensitivity to pleasure stimuli is noticed [26]. There begins to be shaky self-confidence and mental resilience and obsessive thoughts. And the use of the web becomes the only means of providing pleasure [27].

This is why, when being offline, the psychological discomfort associated with not being able to access the web is so characteristic of Alpha internet addiction syndrome [28]. This often manifests itself in anxiety-like disorders, among which we can include: alienation, apathy, insomnia, depression, hypervigilance, uncontrolled outbursts of aggression, anxiety, non-conscientiousness, guilt, procrastination, feelings of worthlessness, avoidance of responsibilities, and mood swings [29].

Inappropriate use of modern technology also carries somatic disorders risks for the Alpha generation [30]. The insufficient level of physical fitness of today's children and adolescents comes to the fore. The vast majority of this generation has problems performing basic gymnastic exercises. Their motor skills are at a lower level in comparison with data from earlier generations [31]. In general, a decline in leisure-time physical activity uptake by the Alpha generation is noted [32].

The Alpha generation's insufficient exercise resulting from their excessive online lives is also reflected in their obesity [33]. The problem of obesity nowadays affects one in five children, with a higher prevalence among boys than among girls. It is assumed that this phenomenon may be increasing [34]. Obesity can cause many diseases: type 2 diabetes, cardiovascular system, cancer, endocrine and metabolic disorders, osteoarthritis [35]. Therefore, the need for technological support to meet the needs of physical activity to curb the adverse trends of obesity among children and adolescents is indicated [36]. An increase in postural defect problems has been noted among the Alpha generation compared to other generations [37]. This is due to their mainly sedentary use of the web [38]. This translates into their passive physical activity and obesity [39]. In addition to this, they carry overloaded school backpacks [40]. The most commonly cited postural defects among the Alpha generation are curvature of the spine, protruding shoulder blades, protruding abdomen, valgus knees and flat feet [41].

Accordingly, a theoretical model of Alpha generation developmental disorders was created (Figure 1). This model is based on the research findings presented in this paper. It assumes that the Alpha generation's developmental disorders resulting from their misuse of technology occur concurrently in the spheres of behaviour, mental, and somatic.

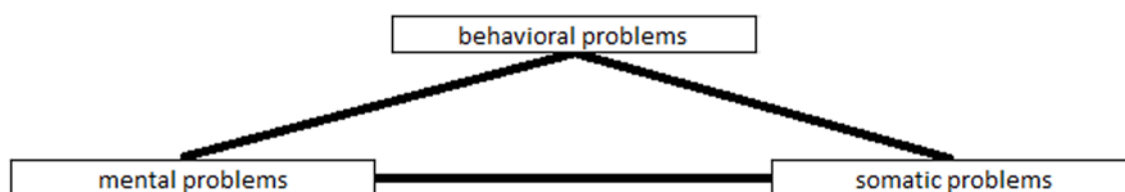


Figure 1. The Alpha Generation Theoretical Model of Developmental Disorders.

4. Discussion

The Alpha Generation Theoretical Model of Developmental Disorders is probably the first attempt to comprehensively capture the effects of deteriorating health among today's children and adolescents due to the lifestyles of an entire digital generation. The Alpha generation makes extensive use of modern technology in their daily functioning. In this sense, the virtual world is as important to them as the real world. The consequences of this are disorders occurring simultaneously in three zones. Technologies are a vehicle for online content, which in excess can influence the occurrence of behavioural disorders. At the same time, the use of technology in excess can create mental disorders. Simultaneously, the use of technology in excess can render somatic disorders.

Referring to the hypothesis on the supreme value criteria of the global civilisation [1], the consequences of the misuse of technology by the youngest generation are described in this article. But should the survival of humanity and nature in a non-degenerate form with responsibility for the coming generations refer to the abandonment of technology? From the point of view of the development of civilisation (i.e. positive changes), this is impossible, since development does not presuppose degeneration [42]. The solution to the problem is to adopt the postulate of innovative agonology with complementary medicine [43]. Since the negative effects of the inappropriate use of modern technology occur simultaneously in three zones: behaviour, mental, and somatics, their prevention should also be parallel in these areas.

Behavioural and mental disorders can be effectively corrected by problem-focused psychological help [44] and cognitive-behavioural current psychotherapeutic interactions [45]. Psychological help should refer to actual diagnosis, assessing behaviour and helping to solve adjustment difficulties [46, 47]. Activities should be directed towards enhancing the strengths of the Alpha generation, providing support in overcoming their disorders and deficits and shaping the proper development of their psyche [48]. Cognitive-behavioural psychotherapy, on the other hand, should aim at learning the distress-generating ways of thinking and then changing them to the right ones [49]. Psychotherapy should be based on specific techniques selected for the individual difficulties of the Alpha Generation And Aimed At Corrective And Compensatory Actions [50, 51]. Somatic Disorders, On the other hand, can be corrected by physical activity undertaken □ structured to the problem □ i.e. individually tailored to the needs of each Alpha individual [52, 53]. These should be attractive forms of exercise, engaging the body and correcting its defects while maintaining a proper diet [54, 55].

Consequently, it has been stated that effectively educating the Alpha generation is a challenge for today's tutors [56]. In order to enhance the potential of the Alpha generation, their health and online-offline balance must be constantly reviewed [57]. The Alpha generation makes intensive use of modern technology and is thus exposed to information overload and social pressure. The acquisition of emotional self-regulation skills, the building of healthy social relationships and proficiency in functioning with and without technology are important here. These issues constitute one of the strands of innovative agonology (acronym INNOAGON, [58, 59]) a new applied science included in the international AHFE (Applied Human Factors and Ergonomics) project.

Limitations and directions for further research

The Alpha Generation Theoretical Model of Developmental Disorders refers to the available research findings in 2024. In this respect, the model creates new knowledge, but it is not definitive. It represents an entry point for further research. Therefore, as knowledge about the Alpha generation increases, the model should be successively expanded. Alpha generation developmental disorder scale (behaviour, mental, somatic) refers to social consequences in general, which creates a new area of research.

5. Conclusions

The theoretical model of developmental disorders of the Alpha generation refers to the behavioural, mental, and somatic spheres, which occur in parallel as possible consequences of inappropriate use of technology.

Data Availability Statement: The data supporting this study's findings are available from the corresponding author upon reasonable request.

Conflicts of Interest: The authors declared no conflict of interest.

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