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## THE INTERNET AS THE NEW BACKYARD: DEVELOPMENTAL CONSEQUENCES OF THE SMARTPHONE LIFESTYLE

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This article discusses the threats related to the excessive use of smartphones, which have replaced backyard games for children in the past, as well as its consequences for the development of the young generation. Robert Kegan's concept of development is used as an analytical tool to diagnose such threats. The text indicates the following developmental risks: a reduced sense of inner control, underdeveloped reflexivity, and reduced physical activity.

**Key words:** backyard play, smartphone lifestyle, neuroticism, reflexivity, development

### Introduction

Throughout history, children's games were considered to be free, spontaneous and interspersed with responsibilities. The youth was found to play outdoors, especially in the meadows, backyards, forests and parks, or at the rivers, streams and ponds. Children's games in the city did not differ much in character from those in the countryside. In general, these casual games can be described as backyard games.

Contemporary children are observed to be increasingly less active and tend to abandon the traditional outdoor play in favour of cyber games that are played indoors (Frost, 2009, pp. 198-236). The internet has become a new backyard, and smartphones and smartphone games have become an inseparable part of their lives.

arable element of the young generation's daily life. It can be said that the smartphone lifestyle has dominated the leisure time activities among children and adolescents.

Hence, the developmental approach is adopted to diagnose the potential effects of the smartphone lifestyle and its expansion. Robert Kegan's concept of development (1983) is used as an analytical tool in this study, which defines the competences that should be achieved by the individual to ensure correct development.

### **From Backyard Games to Playing With Smartphones**

The principal attribute of backyard play is movement, which is essentially related to gross motor skills, such as running, jumping, climbing, wrestling, etc. Struggling with difficulties and gaining satisfaction are crucial properties of playing. In addition, during playtime, children have the opportunity to experience freedom as parental control is kept to a minimum. This is the time for children to frequently engage in risky activities (e.g., walking on rooftops), which allows them to confront and manage risk.

While playing, children do not follow a prearranged schedule but subject themselves to their own rhythm (willingness or reluctance to play), relationships (conflict and reconciliation), natural conditions (weather), and the changing tone of a given experience. Given that all these factors are characterised by a changing rhythm, there is little time for boredom. Nevertheless, boredom still occurs, potentially offering time for reflection. As a result, playtime that involves the implementation of the participants' own plans and the plans of the backyard friends contributes to the development of the ability to reflect.

Prior to the normalisation and influence of the internet, common forms of backyard play included simple games such as hopscotch, statues (also known as Red Light, Green Light or Grandma's Footsteps), colours, and many others, wherein players were required to follow certain rules. The latter were an important socialisation factor promoting fair play, where the participants simultaneously acted as players and judges. This double role was a source of additional difficulties.

In essence, backyard games included challenges and playing with difficulties and risks, since they required invention and offered freedom while choosing the activity (Scharer, 2017). They were not limited to a single location, such as the playground in front of the block of flats or the street, as they could often move to surrounding areas: the grove, meadow, neighbourhood, etc., resulting in an 'augmented backyard' (as an analogy to augmented reality).

The ongoing and gradual desolation of playgrounds and outdoor spaces is defined as play deprivation. The key reasons for these changes include the digitisation of children's and young people's lives and games, less attractive play spaces in the perception of children and excessive control of parents over children's activities (Brown, Patte, 2013, p. 135)

Given the insufficient motor stimulation in cyberspace, children and young people are physically less fit than children from the late decades of the 20<sup>th</sup> century. Global studies show a steady decline in strength and endurance, as well as downward trends with regards to other aspects of physical activity (Masanovic et al., 2020).

Mental health studies of the Internet Generation reveal several deficits. Increased use of social media is associated with a poorer quality of sleep, and a significant relationship has been found between playing video games in the evening and the lack of sleep (Billari et al., 2018). Digital platforms also provide tools conducive to cyberbullying; there is evidence of increased cyberbullying levels in some countries (Livingstone et al., 2016). Furthermore, the use of social media is also associated with body image issues and eating disorders (Fardouly & Vartanian, 2016; Holland & Tiggemann, 2016).

Today's youth has grown up in the era of digital technology. They have been familiar with computers, mobile devices and the internet from an early age. In 2015, a typical 15-year-old student in the OECD countries had used the internet since the age of 10 and spent an average of 29 hours a week online, which is a significant increase compared to 21 hours in 2012 (OECD, 2017). For the generation whose childhood and adolescent years coincided with the era of general access to the internet, time spent online is comparable to the time that the 'pre-internet' children used to spend playing outdoors.

Children and young people are increasingly active online on mobile devices, which makes adult supervision even more difficult (an analogy to children playing outdoors). It is common for teenagers to have a smartphone: nine out of ten 15-year-olds in the OECD area have access to a smartphone, three-quarters have access to a laptop, and just over half have access to a tablet (OECD, 2017).

Satisfaction with life was the highest among moderate internet users spending between one and two hours a day online, even compared to those who surfed the web an hour a day or less on weekdays (OECD, 2017). The World Health Organisation (WHO) found that the lowest satisfaction levels were reported by adolescents whose use of the internet was very low or very high (WHO, 2016). Simultaneously, increased usage of social media, using social media at night and emotional engagement in social media were also associated with poorer sleep and higher levels of anxiety and depression (Woods & Scott, 2016).

In view of the above, the fundamental question arises about the direction of the cause-effect relationship in this trend as it remains unclear whether neurotic teenagers are more likely to engage in smartphone games, including social media, or whether teenagers with higher levels of neuroticism utilise the smartphone environment to regulate their low moods.

One of the possible ways to answer this question is to evaluate online activity from the perspective of the requirements and principles of development indicated in the theories of development. The concept of human development can also be used to diagnose possible threats to development due to the use of electronic media. This study employs Robert Kegan's theory of the development of the self. It defines the necessary competencies that must be formed at the respective stages of development that determine the proper functioning in adulthood.

### **Reality 'Without the Backyard' According to Kegan's Concept of Development**

A brief description of Kegan's concept of development is presented below. It focuses on the aspects necessary for the analysis of virtual reality as a 'new backyard' (Woods, Scott, 2016, pp. 113-125). Kegan identifies six stages of development. Each stage is characterised by the key competencies that the individual acquires through interaction with reality. The individual identifies with a given competence for a certain amount of time, and once formed, it becomes an object or a tool that is used for the development of the next competence. Each competence epigenetically determines the functioning of the individual as a mature person. Failure to develop one of the key competencies may translate into dysfunctions in personal and professional life. The achievement of the key competencies is attributed to the specific phases of biological development. However, it does not imply that it is impossible to train oneself in the competencies at a later age. For example, it is legitimate to assume that the Incorporative Mind can also be developed at the senior age through contact with 'spontaneous' objects, such as children, animals and nature, although it may be not an easy task.

The first key competence is the Incorporative Mind T (Stage 0). Sensitivity to stimuli and adequate responses are the foundation and a prerequisite for survival as well as aesthetic experiences and healthy relationships.

The second key competence is the Impulsive Mind (Stage 1). Being open to internal impulses and the ability to express them makes it possible for the individual to fully use their inherent potential. It is also a condition for building harmonious relationships. It is through the expression of impulses

rather than their suppression that people learn how to negotiate with the environment.

Another key competence is the Imperial Mind (Stage 2), i.e., the ability to create one's own small empire. By creating and managing own structure in the specific environmental conditions and in compliance with own needs, desires and interests, the individual learns to control their reactions and impulses along with regularity and perseverance, and feels satisfaction with commitment and trains themselves in postponing immediate gratification.

The fourth key competence is the Interpersonal Mind (Stage 3). This is the ability to function effectively in an informal group. To this end, one needs the ability to negotiate while not giving up on one's desires. It also denotes the ability to cope with conflicts and cultivate relationships despite the experienced pain.

The fifth key competence is the Institutional Mind (Stage 4). At this stage, human behaviour is modulated and regulated by external policies and procedures. Institutionalality is the ability to internalise this external framework of functioning while maintaining own autonomy.

Lastly, the final key competence is the Interindividual Mind (Stage 5). Built on the Incorporative, Impulsive, Interpersonal and Institutional Minds, its 'value added' is the ability to function productively and sometimes creatively with individuals representing different sensitivity, impulsivity, and views of reality and guided by slightly different rules. Interindividuality is the ability to act effectively in a turbulent environment and intersystemic cooperation.

Kegan's concept of development has been used as a diagnostic tool to assess the developmental effects of the participation of children and adolescents in backyard games and developmental deficits resulting from replacing the latter with smartphone games.

Table 1

Development potential of backyard games and deficits that may result from replacing them with smartphone games (own elaboration based on Blajet (2012), Gray (2011))

Stages of development according to Kegan	Potential contribution of play, with particular emphasis on backyard games, to the development of key competences	Limitations on the development of key competences due to replacing backyard games with smartphone activities
0 - Incorporative Mind	Diverse stimuli trigger a variety of unrestricted reactions. As a result, the individual trains themselves in own sensitivity and possible types of behaviour, particularly in terms of motor skills.	Smartphone hyperstimulation desensitises the individual to subtle stimuli emerging from the natural and anthropogenic environment. It stands in the way of one's proper embedment in reality. It also makes it difficult, if not impossible, to feel subtle bodily sensations.

1 – Impulsive Mind	The freedom of backyard play enables the unfettered expression of internal impulses and the testing of acceptable behaviour. The ability to regulate emotions is also formed, which is then perfected at the following stages.	The ability to feel and externalise internal impulses is also reduced because of the smartphone’s aggression in imposing feelings on the user. Physical activity is also eliminated to a minimum.
2 – Imperial Mind	The (social and physical) environment of the backyard is available on a daily basis and creates the opportunity to perform a series of activities and test different options (pursuit of interests). This enables the individual to create their own original empire. The simplicity of the backyard setting enforces innovation.	Due to its aggressiveness, the smartphone narration replaces the internal narration. The rhythm of the smartphone stimulation and its fragmentation makes it difficult to think and reflect. Therefore, it is difficult to create own original ‘empires’. An excess of stimuli suppresses individual innovation. Fragmentation, immediacy and lack of direct contact form an obstacle in building relationships.
3 – Interpersonal Mind	Regular meetings and activities (games) with peers and the lack of conciliators (parents/guardians) forces children to ‘get along’ and give up certain identifications or habits. Affiliation attitudes are formed despite the seemingly anti-affiliation attitudes present in the group.	The experience of distress leads to ending the contact and breaking the relationship, which makes it impossible to train oneself in conflict resolution. It freezes the individual in egocentrism.
4 – Institutional Mind	Reactivity, openness to impulses, regularity and perseverance, gaining experience in interpersonal clash and joint building transform into a new quality: the ability to create subsystems within the ‘backyard system’ along with the development of one’s own self-system. The competences acquired at this stage include subordination to the role and procedures, ability to make decisions and self-control. In backyard games, it is necessary to adapt one’s own system to other systems (backyard buildings, neighbours, traffic, etc.).	Limited possibilities of confronting and struggling with others make it impossible to create the foundations for the system (self-system). In the online world, it is not necessary to follow the rules, or the rules are not unambiguous (e.g., they are the arbitrary decision of the administrator). This can feed anti-system attitudes and aversion to procedures. On the internet, one can function in various environments and alter them without consequences. This fragmentation of one’s activity and the fluctuation of participants in a given environment makes it impossible to develop a system and a self-system.
5 – Interindividual Mind	The natural need after the achievement of the stage of Institutional Mind is confrontation – an interplay of different systems, both individual and as teams. Risks are taken with the possibility of failure. The aim is to confirm the accuracy and value of the acquired competences, as well as to improve them in uncertain and risky situations.	The lack of the solid foundations for the self (self-system) is not conducive to taking up challenges or seeking confrontation. Hence, there is reluctance towards situations that carry potential risks. As a result, the individual has no opportunity to train themselves in uncertainty and dealing with threats.

## Conclusions

This juxtaposition of the developmental effects of backyard games and smartphone activities can lead to the following conclusions regarding the consequences of the smartphone lifestyle:

1. Smartphone activities can be considered a trap with a ratchet, as they halt the development at lower, egocentric stages. The particular lack of a sufficient dose of interpersonal (Stage 3) and institutional (Stage 4) experiences clashes with others or with procedures, making it impossible to form a sense of inner control, leading to anxiety and depression (OECD, 2017). Deprivation of backyard play can cause the external localisation of control. Children who do not have the opportunity to train themselves in controlling their own actions, making and implementing their own decisions, solving their own problems and following the rules as they grow up, feel that they have no control over their own lives and fate and are dependent on the happiness, good will or whims of others (Gray, 2011).

2. The aggressive online narrative of smartphone applications imposes the external mode of cognition on immature individuals. The design of applications can also be deemed addictive, as an individual is solely required to open the application, and the rest happens on its own. This relieves the user from the need to be reflective, as intuition is enough, since a good application must be intuitive. As a result, smartphone games shape attitudes devoid of reflection, feeding the narcissistic 'I', which is embedded in the environment rather than in the inner self of the individual. The reactions of the external environment, rather than the actual value of one's own activity, become a measure of the individual's value (Błajet, 2012, pp. 185-193).

3. To a large extent, the activity of the individual is conditioned by visual and auditory sensations, while those associated with movement, such as vestibular, tactile and proprioceptive, are almost entirely eliminated. This can cause sensory integration disorders, which reduce the ability to adapt to the demands of the external environment (Mills et al., 2020), contributing to higher levels of neuroticism.

It is possible that the smartphone lifestyle can further increase neuroticism in individuals whose levels of this characteristic are already high. However, given the developmental laws, it can be assumed that the problem of personality disorders caused by intense online activity affects the entire young generation as discussed by Twenge (2017) in his book: *iGen: Why Today's Super-Connected Kids Are Growing Up Less Rebellious, More Tolerant, Less Happy and Completely Unprepared for Adulthood*.

### Author contributions

The author confirms being the sole contributor of this work.

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