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## Research on mechanism of impacts of network addiction of adolescents on the physical health in network information age

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### ABSTRACT

This research will discuss the harms caused by network addiction to the adolescents and will enrich the researches of adolescent's addiction to network to a certain degree as well as offers scientific methods and theoretical basis for solving the problem about adolescent's addiction to network scientifically. The important part of netizens is the youth. The network, on the one hand, can promote growth of the youth, but it indoctrinizes them with unhealthy thoughts as well, so the network addiction problem has attracted high attentions from all sectors of society. The network addiction is a phenomenal behavior for an individual. It is necessary to start with the psychology which evokes the appearance of network addiction in order to remove the network addiction completely. All sectors of society have attached wide attentions to the network addiction of youth. The adolescents should adapt to the new situation in the information network age more reasonably and use the network accurately to build healthy thinking toward the Internet surfing so as to effectively avoid network addiction. The youth among netizens is the most vulnerable to network addiction, as the adolescents are still in the period with weak moral consciousness and values that are easily impacted and they are easily subject to the adverse influence from the harmful information, thus addicting to the network.

### KEYWORDS

Network information age; Youth network addiction behavior; Healthy physique.



**INTRODUCTION**

**Background of the subject**

As a new thing, the Internet is developing so fast that it triggers the networked wave and promotes transition of human civilization and development of social formation. Internet exerts a great impact on the old ideology and leads to the unprecedented reform in the whole society. The internet with new development pattern of social formation will doubtlessly create new world views among the adolescents and bring new opportunities for adolescent socialization, so for the adolescents, Internet causes both opportunities and challenges.

The youth has an important part of netizens. The network can broaden the horizon and bring wide benefits for the adolescents, however, the network is a double-edged sword and the youth is easily led to the wrong path carelessly. This is the network addiction problem that triggers the wide discussions in the society. Relatively, the self-control power of adolescents is weak, thus they are readily attracted by harmful network contents such as the pornographic information and violent games and then addicted to the network. This will not impact their school works and healthy development of body and mind, but also results in great harms for the families and society. A random survey was carried out in Xinjiang for this study and 350 students from 4 ordinary secondary schools were selected to take part in the survey.

**Research significance**

The social ideal which human earnestly longs for is to establish good living environment and build a harmonious socialist society. Strong youths lead to a strong country, so an important requirement for building the harmonious socialist society is to enhance the comprehensive quality and standardize the morality of the teenagers. To adapt to new situation of information network age, it is required to guide the adolescents to correctly use the internet and develop healthy thought so as to prevent network addiction. The adolescent network addiction problem is rich but complex and as well as a new field for researches about current adolescent socialization. Cyber psychology and sociology of technology have listed it as the important subject to study on the network impacts on adolescents. This paper will focus on the study on network impacts on the adolescents and provide suggestions on how to prevent possible problems.

**THE CURRENT SITUATION OF INTERNET IMPACT ON THE ADOLESCENTS**

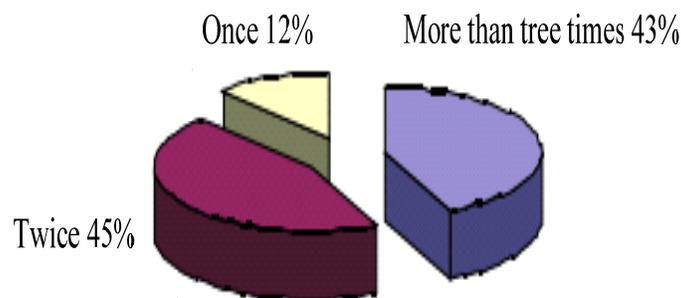
Internet creates new social development pattern and has great impacts on the adolescents. Now through some surveys, we can know the current situation of internet impacts on the adolescents. The questionnaire survey adopted questionnaire forms made by ourselves about adolescent online behaviors in Xinjiang. The result and analysis of questionnaire survey are shown as follows TABLE 1:

**TABLE 1 : Results of field and network survey**

<b>Netizen with network addiction</b>	<b>The proportion of youth netizen (%)</b>	<b>Confidence interval under 95% confidence degree (%)</b>
Field survey	13.2	12.6-13.8
Network survey	16.6	15.8-17.6

**Current situation of the youth’s addiction to network**

The Overnight time of Xinjiang adolescents is shown as Figure 1. TABLE 2 analyzes the difference of adolescent network addiction in the aspects of different genders, grades and regions and the statistical result is shown as follows.



**Figure 1 : Overnight time of xinjiang adolescents**

**TABLE 2 : Data statistics table of adolescent network addiction**

		Network addiction degree					Total
		Serious addiction	Addiction with general degree	Mild addiction	No addiction		
Gender	Boy	Percent	2.8%	11.5%	41.9%	43.8%	100%
	Girl	Percent	2.1%	9.8%	33.9%	54.2%	100%
Grade	Junior high school	Percent	3.5%	13.7%	45.6%	37.2%	100%
	Senior high school	Percent	3.4%	13.2%	44.9%	38.7%	100%
Region	City	Percent	1.5%	8.5%	38.4%	51.6%	100%
	Town	Percent	2.1%	9.6%	41.7%	46.6%	100%
	Village	Percent	2.9%	11.4%	48.5%	52.8%	100%

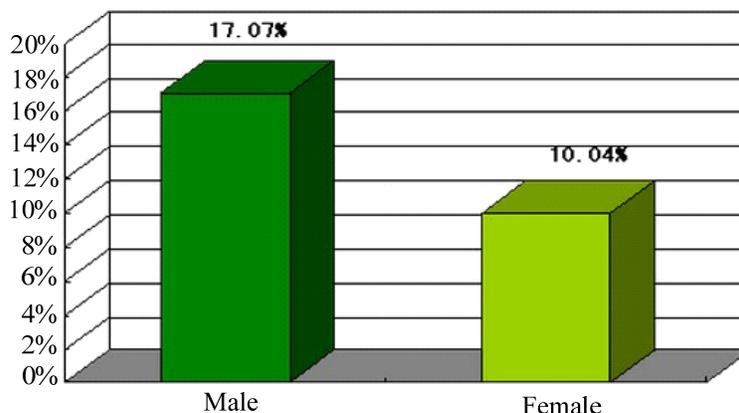
According to the statistical results of TABLE 2, most teenagers have mild addiction to the network, but as a whole, the network addiction phenomenon is serious and has differences between different genders, different grades and different regions. First, in terms of gender, 43.8% of boys and 54.2% of girls think they do not have network addiction. There is 2.8% of boys and 2.1% of girls suffering serious addiction to network, so there is difference of network addiction degree between different genders. Second, in the aspect of grade, 37.2% of junior high school students and 38.7% of senior high schools think they do not have network addiction. For the region, 1.5% of urban students and 2.9% of rural students think they have serious network addiction and 46.6% of town students and 52.8% of rural students think they do not suffer network addiction, so the rural students are addicted to the network more easily. This survey shows that the network addiction degree is closely related to gender, grade and region.

#### Features of adolescent netizen

The Statistical table of adolescent network behaviors of different genders is shown as TABLE 3. The Statistical table of adolescent network behaviors of different genders is shown as Figure 2.

**TABLE 3 : Statistical table of adolescent network behaviors of different genders**

		Main purposes of surfing the Internet						Total
Gender	Playing games	Data collection	Chat	Movies and teleplay	Shopping online	Other		
Boy	61.9%	5.2%	24.8%	3.4%	3.5%	1.2%	100%	
Girl	31.8%	6.3%	51.2%	7.8%	20.9%	2.3%	100%	
Total	46.3%	4.7%	26.7%	8.6%	11.8%	1.9%	100%	

**Figure 2 : Statistical table of adolescent network behaviors of different genders**

The statistical result of Table 3 shows that there is difference between different genders in the aspect of network behavior inclination. The network behaviors of boy mainly consist of game playing. 61.9% of boys think that their primary purpose is to play games followed by online chatting; the main purpose for the girls to surf the internet is to chat. 51.2% of girls regard online friendship and chat as the first entertainment. It is worth mentioning that we can see from the above graph

that the online shopping proportion of girls is higher than that of boys. As a whole, the adolescents are inclined to play games and chat on the Internet.

## CAUSES AND HARMS OF ADOLESCENT NETWORK ADDICTION

### Causes for adolescent network addiction

#### (1) Immature physical and mental development of adolescent

The self-controlling ability of adolescents is weak and their thirst for knowledge is intensive and is curious about various amazing things in the world. Internet, a newly sprouted thing, will attract more attentions from the adolescents than other traditional Medias. Then the strong curiosity drives them to access to the Internet. Compared to the adults, the self-discipline is weaker, so they are easily obsessed by the new world views and the games which never make them bored. The behavior pattern and value view of adolescents have not fixed yet, so they are unable to resist the network temptation and then gradually become addicted to the network. Adolescent ability of cognizance is weak, so in front of this exciting and new information such as fake and pornographic information, they cannot resist. The adolescents accept positive education and they have strong ability to distinguish in the aspect of national destiny and interest, but for the temptation from new things, they are lack of according self-controlling ability to resist. The teenagers have strong self-awareness. They are urgent to get rid of restraints of school and parents and establish self-value too early. The network with free and equality features offer a virtual space for the adolescents and becomes the platform on which the teenagers can show themselves. They think that everyone is equal on the network and they do not have to worry about checks and with anonymity protection, they is able to vent the rebellion.

#### (2) Adverse environment that the adolescents are exposed to

Currently the Internet bars can be seen in every street and the department concerned has enforced a series of regulations to prohibit the juveniles entering Internet bars, but substantively, these regulations fail to change frequent appearance of adolescents in the Internet bars. The adolescents with strong curiosity cannot resist the emerging online games and virtual network chat and they tend to regard Internet bars as paradise. At present, most of adolescents are the only child in a family and high-fed living habits prevent them communicating with their peers. Meanwhile, their parents may be engaged in the work and ignore the affective interaction with their child, so the adolescents who desire to express apply their feelings from real world to the virtual network world. With high-speed development of electronic information age, the network has become indispensable tool for the teenagers to study. Without correct guidance, the teenagers may fail to apply the network correctly and will regard it as a kind of tool for entertainment. At the same time, the adolescents have great study pressure and in order to escape from the reality and reduce the pressure, they will choose to surf the Internet for solace.

### Harms caused by adolescent network addiction

#### (1) Harm on body and mind

After the computer is started, its interior circuits will radiate electromagnetic waves with wide radiation frequency spectrum which has potential dangers to the human body. As computer operation requires fixed body postures and repeated actions, the computer users will often suffer aches in the waist and back, bacteria-free inflammation of articulation etc. Some common chronic diseases such as shoulder joint strain, waist joint strain, elbow joint strain and shortsightedness are all related to long-term operation of computer. If too long time is spent on computer operation and the eyes are too close to the computer screen, the body will be exposed to the harms caused by the radiation. The medical data shows that 90% of people who has spent too much time on computer operation would suffer eye ache, swelling and fatigue; 75% of them would have blurring of vision; more seriously, the serious diseases such as cataract and change of face pigment will be caused. The wrong operation postures will be unfavorable to harmonious development of adolescent body and result in blurring of vision, eye swelling or nausea, emesis and brain over excitation. More seriously, disordered sleep rhythm will be caused and the life may be under danger.

If the teenagers spend too much time on computers, they will become unsociable as the real interpersonal communication is replaced by excessive man-machine interaction. Too much time is spent on the computer, resulting in the reduction of opportunities for improving the relationship with other family members, so they may maintain a unconcerned attitude towards their family members. Meanwhile, the basic language ability and physical and mental development of adolescents will be impacted strongly. They will suffer emotional diseases and increase the aloneness. The adolescents are at the stage with sensitive emotions and they are eager to strongly express any feelings, so the feelings that they fail to express in the real world will be vented in the virtual network and they will become more and more dependent on the virtual network. When they completely put the interdependent relation with other people into the virtual network, they lost themselves eventually and fail to position themselves. In the virtual network world, the adolescents are unable to control themselves and differentiate between right and wrong, but they have strong curiosity. They can speak out freely and this is a strongly lure for them and reduce their self-control ability to nothing and remove their sense of responsibility and morality. The facts have shown that some unhealthy contents in the network will have adverse impacts on normal psychological development, causing their addiction to network. The biological clock of network addicts is disordered, so they are easy to suffer mental fatigue and

attention-deficit disorder, resulting in making mistakes during working. Many youths thus lose their jobs. The excessive obsession to network will pose the economic burden on the parents and decrease affective interaction with their family. A lot of teenagers are instigated by bad network information and idle away in seeking pleasure. When their parents cannot satisfy their demands or the family economic condition is bad, they even choose to commit a crime. The adolescents have weak prevention awareness and self-controlling ability, so that unhealthy network information such as eroticism and violence are great lures to them. Adolescent network addiction will not only strongly impact the school life and family, but also have enormous dangers to the society if the teenagers choose to commit crimes. So the biggest victim of adolescent network addiction is our country and society.

## **(2) The network leads the teenagers to form networked personality characteristics**

The major manifestations of networked personality characters in the aspect of personality indication are: specific man-machine conversations carried out according to different interests, motivations, demands, world views and beliefs of network addicts.

The network world is like a virtual real world for some people who is able to realize communication between human and virtual world through the network world in the traditional society mode. If the adolescents are addicted to this virtual society and act in the real world according to the behavior pattern formed in the virtual network, their normal psychological pattern will be changed. The people with networked personality characteristics have low openness and cannot communicate with others as smoothly as the normal persons. Meanwhile, these people depressed or even autistic. Relevant data shows that the vigilance, emotion and self-controlling ability of network addicts are lower than that of people without network addictions. In the virtual network, it is hard to determine the difference of personality abnormality with a specific standard like the normal personality. But in some cases, the both have substantial difference, so they cannot be treated as the same.

The network personalization of adolescents will ultimately result in the personality distortion. When the network information is open to the public, the thinking ability of adolescents will reduce and ultimately cause significant change and personality distortion. The depression degree is closely related to the adolescent network addiction. The adolescents suffering network addiction are characterized by low self-esteem and lack of motivation in the aspect of personality characteristics. If the teenagers with network personality characteristics are not guided and supervised by their guardians, they are vulnerable to bad information presented in the network and their value, view of life and world view will be seriously impacted.

## **COUNTERMEASURES FOR PREVENTION AND CORRECTION OF ADOLESCENT NETWORK ADDICTION**

### **Creating good social environment**

The country, on the one hand, should enhance the establishment to give full play of learning function of internet; on the other hand, the administration should be strengthened to help the adolescents avoid unhealthy information when they are studying through internet. It is necessary to draw on advantages and avoid disadvantages and reinforce reasonable controls over Internet bars. At present, the country has worked out numerous laws and regulations on prevention of adolescent network addiction, but these systems fail to work effectively in the practice and exist in name only. So the author thinks that it is required to strengthen the regulation and supervision in the management process so as to bring the enforced laws and regulations into play. The game designers should maintain high social responsibility to design healthy games suitable for the teenagers and develop green network games appropriate for the teenagers, namely those games without unhealthy information. The Internet bar administrators should focus on the prevention. The society should enhance the education and guidance to make the adolescents obtain clearer knowledge about the virtual network world and utilize reasonably so as to make best use of the advantages and bypass the disadvantages. The department concerned should regulate the surroundings of campus, enhance filtration of network information, implement control and supervision on the network information, and guide the adolescents to surf the Internet in a civilized manner.

### **The schools should strengthen the guidance**

The key point of task to prevent adolescent network addiction is to strengthen the education on network security by schools. Any school is required to keep the overall requirement of rejuvenating the country through science and education in mind and follow the Party's policies for education. The school should make great efforts to exert the advantage of educational resources at school and greatly improve social and cultural quality of the students through rational management and macroscopic and microcosmic education methods to help the students grow up into the builders for good life in the future and all-round successors of socialist society. The school should hold rich and varied campus cultural activities to develop sound personality characteristics and healthy psychology of students as well as improve their curiosity about the real life and interests in real recreational activities to help the youth network addicts escape from talons of virtual network life.

### **The parents should optimize education environment**

The responsibility of parents is to guide the children to develop good living habits, standard their daily performance and supervise their study. The parents should create good family education environment and coordinate the relationship with children. The parents should pay more attentions to give positive encouragements and guide the children to use internet correctly. Meanwhile, the parents should set standards for themselves and pay attentions to their own words and actions. They should cultivate their behavior sequence and control the behaviors so as to set good example for their children, as the

children can be influenced by what they constantly see and hear. The parents should actively talk with the children so as to know what they are thinking and positively guide their thoughts. In order to reasonably restrain the behaviors of children, the parents should learn how to give more loves and supports to their children. The parents should closely observe the network life of children and take the initiative to obtain relative network knowledge so as to correctly guide the children to use the internet.

### **The individual should enhance self-improvement**

The adolescents should consciously improve the self-discipline and make great efforts to carry forward good Chinese traditional virtues. The adolescents should conduct independent study and practices about the core value system of socialism and center on the patriotism to establish Socialist Concept of Honor and Disgrace and enhance the self idea and moral belief. They are also required to aim at the all-round development and base on the basic moral norm and sense of legal compliance and consciously accept ideological, moral and legal education to promote harmonious development of scientific and cultural quality, ideological and ethical standards and healthy quality.

## **CONCLUSION**

The teenagers should also actively participate in the group activities and increase interpersonal communication; make efforts to acquire the scientific and cultural knowledge; improve the humanistic quality and scientific accomplishment; improve the skills; continuously expand the knowledge domain; improve the ability to solve practical problems; strive to cultivate the consciousness of innovation; enhance the ability of practice; take the initiative to foster the enterprising spirit; master the scientific methods to cope with psychological problems and reasonably adjust and control the emotions. The author firmly believes that the adolescents can continually achieve self-improvement, improve their social values and become pillars of society through correct approaches and methods for self-cultivation.

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