

The Influence of Sense of Alienation on Online Game Addition among College Students

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Abstract Objective To explore the current status of college students' sense of alienation and online game addition, and analyze the impact of sense of alienation on college students' online game addition. **Methods** A total of 349 undergraduates in Guangdong Province were selected by convenience sampling. They were investigated with Young Diagnostic Questionnaire (YDQ), Computer Game Addition Scale for College Students (CGASCS) and Sense of Alienation Questionnaire for Adolescent Students (SAQAS). **Results** First, 8.89% of college students of this group were addicted to online games. Second, the total score of CGASCS and SAQAS were (39.35 ± 16.67) and (193.66 ± 37.26) , respectively. Third, the results of multiple stepwise linear regression showed that except the sense of alienation from living environment, the other 8 dimensions of SAQAS were positively related to the total score of CGASCS ($\beta = .274$ to $.531$, all $P < .05$). **Conclusion** The sense of alienation and online game addition are common mental and behavioral problems among college students, and sense of alienation may be an important factor affecting the online game addition of college students.

Key words: College Students; Internet Addiction (IAD); Online Game Addiction (OGD); Alienation; Influencing Factor

I. Introduction

With the high-speed development of information technology, the Internet has become an indispensable tool for college students, but its negative impact is increasingly obvious, especially the Internet addiction (IAD). According to the 2022 Youth Internet Addiction Report released by the China Youth Network Association on August 18, 2021 [1], at present, there are about 24.042 million teenagers with Internet addiction in China, accounting for 14.1% of the youth Internet users. The highest incidence of Internet addiction is among teenagers aged 18 to 23. Sixty-seven point five percent of teenagers take online games as their main purpose of Internet access and spend the longest time, who belong to online game addiction. It can be seen that college students have become the high incidence population of IAD, with online game addiction the most common.

Internet Addiction Disorder (IAD), also known as Pathological Internet Use (PIU), refers to the obvious

damage of social and psychological functions of individuals caused by excessive use of the Internet, accompanied by tolerance, withdrawal reaction, compulsion and other behaviors related to the Internet access [2-3]. Online game addiction is a kind of internet addiction disorder, which refers to a chronic or periodic infatuation state formed by the repeated use of online games, and produces an irresistible desire to use again; At the same time, it produces the tension and tolerance phenomenon of increasing the use time, and has a sustained physiological and psychological dependence on the pleasure brought by online games [4].

Alienation in English means not in close touch, separation, transfer, dissimilation, insanity, domination by alien forces, or domination by others. In modern Chinese, it is commonly said that "relations and feelings are not close and indifferent". In psychology, alienation refers to the estrangement between an individual and others, society, nature, himself and other relationship networks, and even being dominated and controlled by objects, which causes the individual to have a sense of social isolation, uncontrollability, meaninglessness, oppression and restraint, self-estrangement and other negative emotions [5].

Because of the rapid changes in society, people have increasing stress day by day, being estranged and dissimilated from others and things around them, and experiencing a sense of aimlessness, emptiness, meaninglessness, guilt and depravity. People also gradually lack attention to the natural environment, social network, and themselves, thus forming a sense of alienation. Therefore, almost all social behaviors can be described and explained by "Alienation". "Alienation" has played an important role in the research of racial prejudice, mental illness, class consciousness, interpersonal apathy, labor conflict, self-restraint, political apathy and extremism [6].

College students are in the transition period from childhood to adulthood, and their values and outlook on life are not yet mature. Facing the complex real life, they tend to have a sense of powerlessness and nihilism, which easily leads to a sense of alienation. They often use the Internet as a way to get rid of alienation, thus forming a vicious circle. From this perspective, Internet addiction reflects the powerful control of the network on individuals and their powerlessness; On the other hand, while addicted to the Internet, people will be alienated from real life, unable to integrate into it, feel confused, at a loss, and difficult to live in harmony with the environment, others and society. These characteristics of Internet addicts are very similar to some dimensions of alienation [7, 8]. Therefore, alienation may be an important reason for college students to indulge in online games. It is necessary to deeply explore and analyze the relationship between online game addiction and alienation.

Based on the above analysis, this study intends to explore the current situation of college students' online game addiction and alienation, and analyze relationship between the two through a questionnaire survey of large sample.

II. Objects and Methods

2.1 Objects

The convenience sampling method is adopted to select college students in Guangdong Province as subjects.

400 questionnaires are distributed, and 349 valid are recovered, with an effective rate of 87.25%. There are 171 boys and 178 girls; 70 freshmen, 100 sophomores, 112 juniors and 67 seniors.

2.2 Tools

2.2.1 Young Diagnostic Questionnaire, YDQ [9]

Compiled by Young, YDQ has 8 items. The two-point scoring method is adopted to score 0 or 1 point corresponding to “no” or “yes”. The higher the total score, the more serious the internet addiction is, and the score ≥ 5 points will be determined as internet addiction. In this study, the Cronbach's a coefficient of the total table is 0.838.

2.2.2 Computer Game Addition Scale for College Students, CGASCS [10]

Compiled by Liu Huijun et al. (2007), a total of 24 items are divided into five factors: time management (TM), emotional experience (EE), life conflict (LC), social sacrifice (SS) and abstinence difficulties (AD). The Likert five-point scoring method is used to score from 1 to 5 points corresponding to “least conforming” to “most conforming”. The higher the total score, the more serious the computer game addiction. In this study, the Cronbach's a coefficient of the total table is 0.882, and the Cronbach's a coefficients of the five factors are 0.850, 0.803, 0.791, 0.834 and 0.749, respectively.

2.2.3 Sense of Alienation Questionnaire for Adolescent Students, SAQAS [8]

Compiled by Yang Dong et al (2002), there are 52 items in total, including 6 (three pairs) lie detection questions. SAQAS is divided into 9 dimensions: sense of family alienation (FA), sense of self alienation (SA), sense of natural alienation (NA), sense of alienation of living environment (LEA), sense of meaninglessness (ML), sense of uncontrollability (UC), sense of oppression and restraint (OR), sense of loneliness (LL) and sense of social isolation (SI). The Likert 7-point scoring method is used to score from 1 to 7 points corresponding to “completely inconsistent” to “completely consistent”. The higher the score, the more obvious the tendency of the item (dimension) is. In this study, the Cronbach's a coefficient of the total table is 0.854, and the Cronbach's a coefficients of the nine dimensions are 0.690-0.758.

2.3 Data processing

SPSS 20.0 is used for statistical analysis. The descriptive statistics is adopted to calculate average score and standard deviation; Pearson product-difference correlation is used to explore the correlation between various variables; And multiple stepwise linear regression analysis is used to analyze the impact of alienation on online game addiction.

III. Results

3.1 Common Method Deviation Test

Since the data are all from the questionnaire (self-report of the subjects), there may be common bias. Harman single factor test [11] is used to test the common method deviation. The results show that there are 17 factors with eigenvalues greater than 1, and the first factor explains 24.34% of the total variation, which is less than the critical criterion of 40%. Therefore, the influence of common method bias on the results can be excluded.

3.1 Current situation of college students' online game addiction

3.1.1 Incidence of Internet addiction

According to the diagnostic criteria of Internet addition proposed by Young [9], 46(13.18%) of college students are addicted to Internet. According to the diagnostic criteria of online game addiction proposed by Yang Dong [10], 31 (8.89%) of college students are addicted to online game.

3.1.2 The overall level of computer game addiction and alienation among college students

It can be seen from Table 1 that the total score of CGASCS and the scores of time management and emotional experience are higher than the median range (2.5-3.5), so they are high scores, while the scores of life conflict, social sacrifice and abstinence difficulty are in the median range (2.5-3.5), belonging to normal scores [10]; The sense of social isolation is lower than the median (3.5-4.5), which belongs to lower score; Self alienation is higher than the median (3.5-4.5), which belongs to high score; The total score of SAQAS and the scores of other seven dimensions are in the median range (3.5-4.5), belonging to the normal scores [8].

Table 1 Descriptive Statistics of Total Scores and Dimension Scores of 3 Scales (n=349)

Variable	M	SD	Min	Max	Mean of item	Average SD of item
YDQ	4.39	0.57	3	7	0.55	0.07
TM	7.87	3.53	4	16	3.95	0.88
EE	8.51	3.44	5	19	3.70	0.77
LC	8.80	2.21	6	18	3.47	0.39
SS	7.07	2.78	5	19	3.41	0.56
AD	5.67	2.51	4	17	3.42	0.63
CGASCS	39.35	16.67	25	81	3.64	0.69
FA	16.84	3.29	6	24	4.21	0.83
SA	31.86	4.67	8	38	5.31	0.80
NA	14.96	4.49	5	25	3.74	1.22
LEA	14.56	3.72	4	21	4.52	1.36
ML	24.72	6.70	9	37	4.12	1.15
UC	24.96	6.01	7	36	4.16	1.04
OR	25.80	6.84	6	40	4.30	1.14
LL	31.29	4.43	10	42	4.47	0.70
SI	13.68	3.26	4	24	3.42	0.98

SAQAS	193.6 6	37.2 6	65	259	4.21	0.81
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3.3 The relationship between online game addiction and alienation among college students

3.3.1 Correlation analysis of college students' online game addiction and alienation

Table 2 shows that the total score and scores of nine dimensions of SAQAS are significantly positively correlated with 4 the dimensions of CGASCS ($r=.107\sim.583$, all $P<.05$), except the correlation between sense of self alienation and time management, sense of alienation of living environment and emotional experience.

Table 2 Correlation Matrix between the Scores of CGASCS and SAQAS

Variable	FA	SA	NA	LEA	ML	UC	OR	LL	SI	SAQAS
TM	.213**	.308**	.361**	.068	.471**	.350**	.202**	.374**	.328*	.406**
EE	.332**	.398**	.569**	.046	.583**	.501**	.311**	.491**	.465*	.566**
LC	.279**	.261**	.434**	.111*	.451**	.315**	.279**	.328**	.411*	.429**
SS	.319**	.222**	.364**	.126*	.402**	.306**	.247**	.351**	.333*	.389**
AD	.231**	.249**	.379**	.137*	.400**	.216**	.129**	.228**	.290*	.350**
CGASCS	.314**	.332**	.486**	.107*	.531**	.393**	.274**	.411**	.423*	.494**

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; The same below.

3.3.2 Multiple Stepwise Linear Regression Analysis of Impact of Alienation on Online game addiction among college students

With the total score of CGASCS as the dependent variable and the scores of 9 dimensions of SAQAS as the independent variables, the multiple stepwise linear regression analysis is conducted within 95% confidence interval, and the results are shown in Table 3.

It can be seen from Table 3 that excluding the sense of alienation from living environment, the scores of the other eight dimensions of SAQAS positively predict the total score of CGASCS ($\beta=.274\sim.531$, all $P<.001$).

Table 3 Multiple Stepwise Linear Regression Analysis of the Impact of the Eight Dimensions of SAQAS on the Total Score of CGASCS

Dependent variable	Independent variables	B	SE	β	<i>t</i>	<i>P</i>	R^2	R_{adj}^2
CGASCS	FA	.441	.073	.314	5.903	<.001	.397	.394
	SA	.627	.066	.486	3.744	<.001		
	NA	.501	.067	.332	7.007	<.001		
	ML	.826	.127	.531	4.147	<.001		
	UC	.559	.083	.393	2.687	.021		
	LL	.634	.078	.411	3.868	<.001		
	OR	.399	.056	.274	.4555	<.001		
	SI	.619	.098	.423	-4.669	<.001		

IV. Discussion

The total score of CGASCS and the scores of time management and emotional experience of college students are higher than the median (2.5-3.5), belonging to high scores, while the scores of life conflict, social sacrifice and abstinence difficulty ranked the median (2.5-3.5), belonging to normal scores; The sense of social isolation is lower than the median (3.5-4.5), which belongs to the lower score; Self alienation is higher than the median (3.5-4.5), which belongs to a high score; The total score of SAQAS and the scores of other seven dimensions ranked the median of the scale (3.5-4.5), belonging to the normal scores. The above scores of this group are higher than those of previous studies [12-14], suggesting that college students generally have a high level of online game addiction tendency, and their sense of alienation is also relatively obvious, which is widely reflected in all aspects of life; And as time goes by, college students' online game addiction tendency and alienation tend to become more and more serious.

The results of multiple stepwise linear regression show that the scores of the eight dimensions of SAQAS (excluding the sense of alienation from living environment) positively predict the total score of CGASCS. It is suggested that alienation is one of the important reasons for college students' online game addiction.

The sense of interpersonal alienation (loneliness, family alienation and social isolation) reflects the interpersonal emotion alienation, indifference and lack. Loneliness is a sense of alienation between an individual and those close to him. The sense of family estrangement refers to the difficulty of individuals and their relatives in thinking and feeling. Social isolation is a sense of helplessness caused by inadmissibility in the interaction with others, groups and society. Due to the role of the "generation gap", college students often have differences with parents, teachers and social figures in ideas and concepts. Although college students are in the period of moratorium, because of the lag in psychological development, their psychology also has obvious characteristics of late adolescence [15]. They are not good at discussing and negotiating with others, but are willing and eager to promote personality, oppose convention and authority. On the other hand, their views are not easily accepted

by others. So the psychological distance between college students and others tends to increase, and create a sense of alienation.

With the advancement of China's urbanization, more and more land has been reclaimed and requisitioned. Even in rural areas, the original natural environment has been greatly destroyed. When people enjoy the convenience brought by modernization, they are also far away from the natural environment. In addition, extreme bad weather such as haze and sandstorm often occur, which makes people's desire to be close to nature more difficult to meet, and it is easy to produce a high sense of alienation from the natural environment. Thus, people are unfamiliar with the natural environment, often feel that the natural environment is not suitable for them, but can do nothing, and lack of exploration and attachment to nature.

The sense of social alienation (including the sense of oppression and restraint, the sense of uncontrollability, the sense of self-alienation and the sense of insignificance) mainly reflects individuals' strong sense of stress (sense of oppression) caused by intense study and work, and worries that cannot be copied with. The sense of uncontrollability refers to a negative feeling caused by an individual's inability to exert influence on the social environment in which he participates in the interaction. Self-alienation refers to the attitude of being not recognized, accepted or even hated by oneself, which is caused by the contradiction and inconsistency between the ideal self and the real self without establishing self-identity [15]. The sense of insignificance is a sense of alienation between individuals and their original values, life goals, etc. It is a sense of lack of behavioral guidance or belief guidance, such as feeling that life is meaningless and life is boring. People with high sense of self-alienation experience more sense of insignificance than those with low sense of self-alienation. Because people with high sense of self-alienation lack objective and in-depth exploration of their career, religious beliefs, political views and other fields of life, cannot successfully answer "who am I", and cannot make flexible and lasting commitments, their life goals are not explicit, all areas of life are chaotic, without long-term ideals and pursuits.

Due to the influence of interpersonal alienation, social alienation and natural environment alienation, individuals are difficult to approach nature, social environment, others and themselves in space, emotion and thought, and lack of necessary information exchange, which makes them unable to obtain sufficient information and emotional support, and in a state of "information deprivation" and "emotional loss" [16]. In order to compensate for these "deprivations" and "deficiencies", individuals tend to turn to online games. Online games can simulate various characters, plots and scenes. Its verisimilitude can make individuals immerse themselves in nature, successfully socialize with virtual characters of various identities and get their praise, resonance and support. They can play various desired roles in the virtual scene, become experts and celebrities, handle various affairs perfectly, devise clever strategies, turn the clouds over the rain, and achieve great achievements. In this way, individuals can temporarily get rid of the anxiety, depression and loneliness caused by various realistic alienation, and form online game addiction through the establishment of new habits under the reinforcement of the principle of happiness [17].

V. Conclusion

This study mainly discusses the current situation of college students' online game addiction and alienation, analyzes the relationship between them, and confirms the strengthening effect of alienation on online game addiction. The results of this study suggest that the establishment of harmonious social relations can help alleviate the sense of alienation, better avoid behavioral problems such as online game addiction, and promote the healthy growth of college students' body and mind.

Conferences

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