

The Influence of Self-Control on Media Literacy of College Students

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Abstract. This study explores the influence of self-control on eight dimensions of media literacy to put forward some suggestions to enhance self-control and media literacy of college students. Questionnaires were employed in the survey and SPSS was adopted to test the hypothesis concerning the relationship between different variables. The results show that self-control is positively related to media literacy, new media skill and utilization capacities; negatively related to truth seeking, analysis, critical thinking capacities and moral cognition.

Keywords: *self-control, media literacy, college student*

1. Introduction

According to the 44th statistical report on the development of the Internet in China, by June 2019, the penetration rate of Internet users had reached 61.2%, and students accounted for the highest proportion of 26%, the proportion of 20-29 years old is the highest at 24.6%. The Internet attracts college students to become its main participants because of its broad territory, space extension, information openness, personnel equality and personality compatibility. Faced with the double-edged sword of the Internet, college students, while enjoying convenient information and diversified interactions, also deviate, lose their temper, rely on and even become addicted to the Internet due to overuse, abuse and improper use, resulting in addiction symptoms such as interpersonal problems, impulse control disorders, time management problems and physical and mental health damage.

Previous studies have shown that self-control has a significant relationship with mobile phone dependence and addiction[1-4], and self-control has a significant mediating or accommodate effect[5,6,7] with network deviant behavior, network attack behavior and network pathological use, etc. This shows the importance of self-control in exerting negative effects on the Internet on college students. As a comprehensive ability to obtain, analyze, evaluate and disseminate information, some scholars have shown that different dimensions of media literacy have significant and respectively impacts on Internet addiction[8,9]. In view of the important influence of media literacy and self-control on Internet addiction, some scholars have mentioned that self-control can be improved by cultivating media literacy [10]. Therefore, this paper attempts to study the relationship between the dimensions of self-control and media literacy in an empirical way for the first time, and provides suggestions on the cultivation of self-control and media literacy for college students.

2. Theoretical Model and Hypothesis

The American media literacy research center defines media literacy as people's ability to choose, understand, question, evaluate, create, produce and respond to media information. Later, scholars reached a consensus that media literacy refers to "the ability of citizens to acquire, analyze, evaluate and disseminate information in various forms". Based on the California critical thinking tendency survey scale, media literacy is divided into eight dimensions, including basic cognition, truth seeking, analytical ability, new media skills, moral cognition, legal cognition, utilization ability and critical thinking.

Self-control is the ability of an individual to consciously control impulsive behaviors and resist the ability to meet immediate needs and desires in order to carry out goal-directed behaviors that can bring long-term benefits. High self-control ability of individuals, under the long-term goal

orientation, guide the network thinking and behavior, thus constantly improve network media literacy in the process, including basic cognitive, moral cognition and cognitive law knowledge and seek the truth, the analysis ability, the new media skills, use ability and critical thinking ability, so as to effectively achieve long-term goals. Therefore, this paper assumes that individuals with strong self-control have a high level of media literacy. Moreover, the eight dimensions of media literacy, including basic cognition, truth seeking, analytical ability, new media skills, moral cognition, legal cognition, utilization ability and critical thinking, are positively correlated with self-control.

3. Research Methods

3.1 Definition and Measurement of Variables

In order to ensure the content validity of the scale, the variables involving in this paper are all derived from the classical literature, and the questionnaire adopts Likert 5-point scale. The media literacy questionnaire, based on the California critical thinking tendency survey scale, is divided into eight parts, including basic cognition, truth seeking, analytical ability, new media skills, moral cognition, legal cognition, utilization ability and critical thinking, with a total of 66 questions. Basic cognition focuses on analyzing some basic cognitive abilities of college students to the characteristics of new media. Seeking the truth focuses on analyzing college students' ability of selective contact and active thinking of information. Analysis ability focuses on analyzing college students' ability to distinguish truth from falsehood. New media skills focus on whether college students are good at using new media to release information and distinguish or clarify rumors in daily life. Moral cognition focuses on analyzing whether college students will measure their media behaviors from a moral perspective in their daily media activities. Legal cognition is to analyze whether college students have an understanding of media law and media violation. The use of the ability to analyze the university students in daily life to the use of media and the main activities. Critical thinking focuses on analyzing the critical cognition and thinking ability of college students in the new media environment.

The self-control Scale (SCS) revised by Shuhua Tan et al [11]. was used to measure the self-control ability of college students, with a total of 13 items.

3.2 Data Collection

This study took college students from an independent university in xi 'an city as the target and randomly distributed questionnaires for investigation. A total of 287 valid questionnaires were received, of which 51.6% were male and 48.4% were female.

4. Data Analysis

4.1 Reliability and Validity Analysis

SPSS was used to analyze the reliability and structural validity of each variable, as shown in table 1. Cronbach's Alpha and KMO of each scale were both bigger than the usual critical value of 0.7, and Bartlett's sphericity test was significant, indicating good reliability and structural validity.

4.2 Regression Analysis

In this paper, SPSS was used to conduct regression analysis on all dimensions of self-control and media literacy. The results are shown in table 2: self-control and media literacy are positively correlated. Individuals with strong self-control have high media literacy. New media skills and utilization ability are positively correlated with self-control. But there is a negative correlation between truth seeking, analytical ability, moral cognition, critical thinking and self-control, which is inconsistent with the hypothesis. The relationship between basic knowledge, legal knowledge and self-control fails to pass the test.

Table 1. Reliability and Validity of Variables

	Variable	Item	Cronbach's Alpha	KMO	Bartlett	
Dependent variable	Self-control	14	0.828	0.784	0.000	
	Overall	66	0.902	0.604	0.000	
Independent variable	Media Literacy	Basic cognition	9	0.874	0.855	0.000
		Truth seeking	11	0.809	0.764	0.000
		Analysis capacity	11	0.881	0.844	0.000
		New media skills	8	0.801	0.721	0.000
		Moral cognition	9	0.854	0.794	0.000
		Legal cognition	5	0.823	0.813	0.000
		Utilization capacity	9	0.812	0.741	0.000
		Critical thinking	4	0.784	0.720	0.000

Table 2. Regression Analysis of Self-control and Media Literacy

Dependent variable	ΔR2	B	Standard Coefficient	F
Media literacy	0.119	2.789**	0.353**	21.514**
Basic cognition	-0.003	2.217**	-0.06	0.542
Truth seeking	0.164	3.129**	-0.411**	30.727**
Analysis capability	0.154	3.054**	-0.400**	28.775**
New media skills	0.044	2.580**	0.225*	8.060*
Moral cognition	0.034	2.826**	-0.202*	6.391*
Moral cognition	0.002	2.875**	0.054	0.423
Utilization capacity	0.023	1.997**	0.182*	4.635*
Critical thinking	0.045	2.613**	-0.227**	8.208*

Note: correlation coefficient significance level * $p < 0.05$; ** $p < 0.01$.

5. Results and Suggestions

This study shows that self-control is positively correlated with media literacy. Individuals with strong self-control have high media literacy. Self-control is positively correlated with new media skills and utilization ability. Individuals with high self-control can reasonably use new media to release information, learn and plan, so they have high new media skills and utilization ability. But finding the truth, critical thinking, analytical ability, moral cognition are negatively related to the self-control, with the assumption that reason may be that the paper sample for college students of independent colleges, schools relative strict control on the environment and learning, the students' autonomous ability is low, more self-control in learning is passive, so truth seeking, analysis and critical thinking skills lack of education and training opportunities, so is low; However, the stricter the school control, the more students rebound, coupled with the lack of targeted education, the lower the moral awareness.

Based on the above research results, suggestions are proposed: (1) self-control can reduce the negative effects of network, improve academic performance and enhance media literacy, so both schools and individuals should attach importance to the cultivation of self-control. It is suggested that schools should strengthen students' goal orientation by improving teaching, activities and environment, especially long-term goals, and actively guide students' behaviors through goals, not only to improve their self-control from the management system, but also to improve their subjective initiative in the long run. (2) in the aspect of media literacy training, it is suggested that schools and teachers improve the teaching environment and methods to integrate media literacy into daily teaching activities and improve students' knowledge and ability through participatory communication; At the same time, college students should conduct systematic learning through online courses from an individual perspective, and practice and improve in daily learning.

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