

THE EFFECT OF A FAMILY-BASED INTERVENTION MODEL ON INTERNET-ADDICTED CHINESE ADOLESCENTS

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We aimed to evaluate the effectiveness of a family-based intervention program for Internet addiction in Chinese adolescents. Adolescents ($N = 57$), diagnosed as having Internet addiction, were divided randomly into an intervention group ($n = 28$) and a control group ($n = 29$). Participants in the intervention group participated in a 14-session family-based group intervention while participants in the control group received conventional group therapy only. Assessment tools were administered to both groups at baseline, immediately after the intervention, and at 1-month and 3-month follow-ups. Results indicated that the family-based group intervention is more effective in decreasing Internet use and enhancing family function.

Keywords: Internet addiction, adolescents, family-based intervention, China.

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The authors would like to thank the patients who participated and their parents, along with the staff from the Addiction Medical Treatment Center of the Beijing Military Zone General Hospital. This project was supported in 2008 by the General Program of Social Sciences of the Beijing Municipal Education Committee (Grant SM200810025002).

Appreciation is due to anonymous reviewers.

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The Internet has become an important tool in everyday life. As an essential media channel, it is routinely used for personal communication, academic research, information exchange, and entertainment (Davis, Flett, & Besser, 2002). Data from the China Internet Network Information Center (2010) showed that, by December 31, 2009, the number of Chinese Internet users had reached 384 million, and, of these, the proportion of users aged 10-19 comprised 31.8%. With this soaring number, the negative impacts of Internet use should be kept in mind, especially the problem of Internet addiction (Bricolo, Gentile, Smelser, & Serpelloni, 2007; Iskender & Akin, 2010). The term *Internet Addiction Disorder* was first used by Young (1998), who described Internet addiction as *a wide variety of behaviors and an impulse-control disorder which does not involve an intoxicant*. Young listed diagnostic criteria for Internet addiction similar to those for chemical substance dependence and pointed out that Internet addiction adversely affected physical health, family life, and academic performance (Young, 1999a). Previous researchers found that 1.4% to 17.9% of adolescents have Internet addiction in both Western and Eastern societies (Cao & Su, 2007; Jang, Hwang, & Choi, 2008; Kaltiala-Heino, Lintonen, & Rimpelä, 2004; Mythily, Qiu, & Winslow, 2008). The latest official investigation reports of Internet addiction in Chinese adolescents indicated that, by 2010, the proportion of Chinese urban youth Internet users addicted to the Internet will be 14.1% (Chinese Youth Internet Association, 2010).

From the perspective of the family system theory, Stanton (1977) describes the addict or alcoholic as the family member with the least amount of power within the family and who develops an illness that unifies the remainder of the family. As family anxiety rises, the symptoms of addictive behavior become worse. Increases in such "ill" behavior unify the family to support the afflicted one. The addict thus serves the function of maintaining and preserving the family. So, not only attempting to simply treat the adolescent but also addressing the family once again will increase the potential for the recovery of a young life (Cook, 2001).

Over the past several years, relationships have been demonstrated between Internet addiction and individual, environmental, and familial factors. According to Young and Rogers (1999), excessive time spent online might increase the risk of Internet addiction. Social-psychological or personality variables, such as sensation seeking, loneliness, depression, poor motivation, fear of rejection, and the need for approval have been reportedly associated with this addictive behavior (Lin & Tsai, 2002; Whang, Lee, & Chang, 2003; Yen, Ko, Yen, Wu, & Yang, 2007). In addition, significant positive correlations were found between interpersonal problems and Internet addiction in adolescents (Seo, Kang, & Yom, 2009).

In this field, some attention was given also to the relationship between family factors and Internet addiction. Previous researchers have documented that an

adolescent's family environment is highly predictive for adolescent Internet addiction (Nam, 2002; Young, 1999a). According to Davis (2001), adolescents whose parents provide insufficient attention and support are more likely to be psychologically unstable, which leads to overusing the Internet in order to escape their home situations. In a South Korean study it was found that not only protective factors (e.g., parenting attitudes, family communication, and family cohesion) but also risk factors of family violence (e.g., marital violence and parent-to-child violence) are strongly associated with Internet addiction (Park, Kim, & Cho, 2008). And in China, due to the one-child family policy, most urban adolescents come from one-child families. In the current climate of fierce academic competition, there are particular concerns that with all parental expectations and aspirations focused on just one child, these pressures are leading to high rates of anxiety and depression, and behavioral problems in Chinese adolescents (Liu, Ma, Kurita, & Tang, 1999; Wan, Fan, Lin, & Jing, 1994). According to the recent investigation using *Egna Minnen av Barndomsuppförstran* (EMBU; a Swedish inventory of parental rearing practices) profiles of adolescents with IAD in China, parental methods of education within the family and family functioning were closely associated with Internet addiction in adolescents. The parental behavioral patterns for adolescents with IAD tend to be more overinvolved, more punitive, and involve more rejection and less emotional warmth (Tao, Huang, Wang, & Zhang, 2009).

On the basis of studies concerning related factors of Internet addiction, many researchers have offered their suggestions with regard to Internet addiction intervention. And many of them have listed improving family functioning as one of the intervention focuses (Ko, Yen, Yen, Lin, & Yang, 2007; Young, 1999b). Chinese scientist Ran Tao suggested that family-based prevention of IAD may be necessary. Unfortunately, a survey of the literature shows that little research emphasizing promoting family function for Internet addiction exists. Most treatments were aimed at changing the addictive behavior only; such treatments include behavioral or cognitive therapy (Davis, 2001; Young, 1999b), reality therapy group counseling programs (Kim, 2007), as well as group therapy with a combination of readiness to change, cognitive behavioral therapy, and motivational interviewing interventions (Orzack, Voluse, Wolf, & Hennen, 2006). Some researchers investigated the effect of intervention integrated with family therapy, but only stayed at the level of individual counseling (Yang & Hao, 2005).

Based on a thorough review of the literature on intervention strategies and treatment techniques used in the fields of substance abuse, addictive behavior, family counseling, and group psychotherapy, combined with features commonly associated with Chinese families and many years of previous work experience on Internet addiction, in this study we aimed to develop a half-structural

(i.e., part designed in advanced, part impromptu as needed during therapy) family-based group intervention model to cure Internet addiction in adolescents. We hypothesized that, when family functioning was improved through the application of this model, the addictive behavior would be improved as a result.

METHOD

DESIGN AND SAMPLE

Participants were recruited between March 1st and July 31st, 2008, from among the inpatients at the Addiction Medical Treatment Center of the Beijing Military Zone General Hospital. All patients were identified as Internet addicts according to Ran Tao's diagnostic criteria as described below (Tao, Huang, Wang, Zhang, Zhang, & Li, 2009). None of participants had serious physical, psychological, or mental disorders. Ethical approval was obtained from the Beijing Military Zone General Hospital Ethics Committee. All participants gave closed hospitalization consent and informed consent for both the trial and the subsequent study.

A total of 57 participants formed the sample for this study. All were aged between 14 and 25 and agreed to complete 1-month and 3-month follow-ups. Trained research assistants who were blind to individual participants' group status conducted a baseline assessment. Participant's took an average of 30-40 minutes to complete the assessment. Randomization was independently achieved by the last author, using a computer-generated allocation schedule. The experimental group comprised 28 participants, and the remaining 29 served as the control group. The experimental group included 3 females and 25 males (24 middle-school students and 4 college students) with an average age of 17.88 ± 3 ; the control group included 4 females and 25 males (26 middle-school students and 3 college students) with an average age of 18.32 ± 2 . The differences between the two groups in terms of age, gender, and education background were not statistically significant.

The members in the control group received conventional therapy in the treatment center, which included military training, consisting of long-distance running, weightlifting, formation drill, and swimming, and group therapy focused on treating addictive behaviors only. The experimental group members and their parents completed a family-based half-structural group therapy program. Some members in both groups received pharmacological treatments and individual counseling. Pretest and posttest scores based on the same assessment tools as described below were collected from members of both experimental and control groups. Apart from the baseline assessment, research assistants independently carried out three posttests, which occurred immediately after the intervention and at 1-month and 3-month follow-ups. These research assistants did not take part in the intervention, nor did they know the purpose of this study; they were responsible only for the distribution and collection of questionnaires.

Because all the participants signed closed hospitalization consent, no one dropped out during the intervention. However, two participants in the control group dropped out prior to the 3-month follow-up. As both of them left Beijing, we were unable to contact them.

INSTRUMENTS

Internet addiction diagnostic criteria These criteria were proposed by Tao et al. (2009b).

Symptom criterion All the following must be present: Preoccupation with the Internet (thinks about previous online activity or anticipates next online session); Withdrawal, as manifested by a dysphoric mood, anxiety, irritability, and boredom after several days without Internet activity.

At least one (or more) of the following:

Tolerance, or a marked increase in Internet use required to achieve satisfaction; Persistent desire and/or unsuccessful attempts to control, reduce, or discontinue Internet use; Continued excessive use of Internet despite knowledge of having a persistent or recurrent physical or psychological problem likely to have been caused or exacerbated by Internet use; Loss of interest in previous hobbies or forms of entertainment as a direct result of, and with the exception of, Internet use; Uses the Internet to escape or relieve a dysphoric mood (e.g., feelings of helplessness, guilt, anxiety).

Exclusion criterion Excessive Internet use is not better accounted for by psychotic disorders or bipolar I disorder.

Clinically significant impairment criterion Functional impairments (reduced social, academic, working ability), including loss of a significant relationship, job, educational, or career opportunities.

Course criterion Duration of Internet addiction must have lasted for a minimum of 3 months, with at least 6 hours of Internet usage (not related to business or academic work) per day.

Online Cognition Scale (OCS) The OCS was developed by Davis (2001) and contains four subscales aimed at measuring social comfort, loneliness/depression, diminished impulse control, and distraction, with a total of 36 items. It is a 7-level self-rating inventory; a higher score represents stronger Internet addiction. This scale has high internal consistency ($\alpha = .94$).

Family Assessment Device (FAD) This instrument was designed by Epstein and Baldwin (1983) with guidance from the McMaster household function model and is used to evaluate the ability of a family to fulfill basic tasks and achieve basic functions. This scale includes 60 items, used to evaluate seven aspects of family functioning: problem solving (PS), communication (CM), roles (RL), affective responsiveness (AR), affective involvement (AI), behavior control (BC), and general functioning (GF). Half of the items are used for the

detection of unhealthy family functioning, while the other half address healthy family functioning. The higher the score on each subscale, the worse the family functioning. The reliability coefficient of the FAD ranges from .72-.92, and Cronbach's α ranges from .78-.86 (Epstein & Baldwin, 1983).

Perceived Social Support Scale (PSSS) This instrument was developed by Blumenthal and colleagues (1987) for use in evaluating social support based on self-understanding and self-perception. The scale includes 12 self-rated items, with each item scored on a 7-point Likert scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*. The internal uniformity coefficient of this scale is .88 and the test-retest reliability is .85.

Mach Scale IV Version 1 This scale was developed to assess Machiavellianism (Christie & Geis, 1970), that is, a tendency to deceive or manipulate others for personal gain. By measuring the general strategy participants use to get along with other people, this 7-point Likert self-rating scale ranging from 1 = *strongly disagree* to 7 = *strongly agree* can evaluate the interpersonal trust of the participants. The uniformity between the items in the Mach Scale IV Version 1 is around .38, the split reliability is .79; and as for convergent validity, the Mach Scale IV is highly related with the trustworthiness subscale of the Philosophies of Human Nature Scale (Wrightsmen, 1964) ($r = -.70-.80$).

INTERVENTION

This family-based half-structural group therapy was developed with five goals in mind: promoting a supportive environment; studying how to correctly perceive and use the Internet; changing cognition of themselves and establishing self-confidence; improving family functioning; and fostering hope for future recovery. The 28 patients in the experimental group were divided into three groups. Groups 1 and 2 had 10 people, and Group 3 had eight people. Groups met with two therapists (one always a woman) for 14 weekly sessions, each lasting 90-120 minutes

Therapists Professionals were a 52-year-old male psychologist, a 34-year-old male occupational therapist, and two female therapist assistants (ages 28 and 29). All have extensive experience in practicing group therapy (18, 5, 4, and 4 years of experience, respectively). Of the three subgroups of the experimental group, the psychologist conducted one group and the occupational therapist conducted the other two groups; the two assistants took part in the therapy implementation of all groups. The occupational therapist has been trained in cognitive behavioral therapy (CBT), family therapy, and psychodrama therapy, by licensed trainers.

Group sessions In this research, group interventions were arranged 14 times in total, seven times for Internet-addicted adolescents, four times for their parents, and the remaining three times for both Internet addicted adolescents and their parents. Strategies and techniques used in this group intervention are summarized in Table 1.

TABLE 1
STRATEGIES AND TECHNIQUES USED IN GROUP INTERVENTION

Sessions for Internet addicted adolescents

- Discussing positive and negative effects of Internet.
- Discussing and handling resistance to efforts made to change Internet addictive behavior.
- Exploring and understanding themselves through dream interpretation and sandplay.
- Enhancing interpersonal communication skills through role play and discussion.
- Expressing affection and disappointment to parents through psychodrama and role play.
- Practicing understanding parents through psychodrama and role play.

Sessions for the parents of Internet addicted adolescents

- Discussing the impact of the child's Internet addiction on their parents' lives.
- Discussing how to correctly deal with the child's Internet addiction.
- Expressing affection and disappointment to children through psychodrama and role play.
- Practicing understanding children through psychodrama and role play.

Sessions for both Internet addicted adolescents and their parents

- Releasing pent-up emotions and expressing affection to each other.
 - Resolving conflicts and facilitating congruent communication between parents and children.
 - Dealing with unbalanced family power and improving family functioning.
-

STATISTICAL ANALYSIS

Statistical analysis was carried out using SPSS version 11.5. The intervention effects of the experimental group and the control group were compared using two-way analysis of variance (ANOVA) and least significant difference (LSD). Due to ethics and occupational policy, a direct comparison of the control and experimental groups could not be carried out. For the OCS and other scales scores of the two groups three months after the intervention, comparative analysis of the intervention effects was established using independent *t* tests, where $p < .05$ is considered statistically significant.

RESULTS

COMPARISON OF THE EXPERIMENTAL GROUP BEFORE AND AFTER THE INTERVENTION

The variations within the experimental group in all dimensions and total scores of OCS, communication, roles, affective responsiveness, general functioning scales in FAD, PSSS total score, and Mach Scale IV total score before and after the intervention were all found to be statistically significant, along with their comparative variations between different time points before and after the intervention (see Table 2).

COMPARISON OF THE CONTROL GROUP BEFORE AND AFTER THE INTERVENTION

The variations of the dimensions and total scores within the control group in OCS before and after the intervention were statistically significant, and their comparative variations before and after the intervention were also found to be statistically significant (see Table 3).

TABLE 2
THE EXPERIMENTAL GROUP'S SCORES IN ALL SCALES BEFORE AND AFTER INTERVENTION (*M* ± *SD*)

Index	Pre-intervention			Post-intervention			<i>F</i>	<i>p</i>
	Pre-intervention	Baseline	1 month	1 month	3 month	3 month		
OCS	Social comfort	47.75 ± 13.56	36.14 ± 11.10***	34.57 ± 9.96***	33.96 ± 9.69***	17.779	.000	
	Loneliness/depression	16.96 ± 7.05	13.43 ± 4.14***	13.18 ± 4.03***	13.07 ± 3.92***	6.644	.001	
	Diminished impulse control	4.54 ± 12.50	26.29 ± 8.91***	25.29 ± 8.25***	24.61 ± 7.78***	31.179	.000	
	Distraction	31.21 ± 6.64	21.57 ± 7.13***	2.61 ± 6.71***	19.93 ± 6.64***	32.851	.000	
	OCS total	136.46 ± 34.72	97.43 ± 27.28***	93.64 ± 25.09***	91.57 ± 24.29***	27.781	.000	
FAD	FAD problem solving	13.43 ± 2.64	12.64 ± 2.11*	12.61 ± 2.13*	12.61 ± 2.13*	2.274	.086	
	Communication	21.11 ± 3.06	19.25 ± 3.74**	19.07 ± 3.64**	19.04 ± 3.62**	5.842	.001	
	Roles	25.75 ± 3.85	24.11 ± 3.45**	23.93 ± 3.39**	23.86 ± 3.40**	4.867	.004	
	Affective responsiveness	14.61 ± 2.99	13.18 ± 2.58**	13.18 ± 2.63**	13.18 ± 2.63**	3.981	.011	
PSSS	Affective involvement	16.04 ± 2.82	15.89 ± 2.62	15.71 ± 2.64	15.71 ± 2.64	.179	.911	
	Behavior control	19.61 ± 3.26	19.68 ± 3.24	19.54 ± 3.17	19.57 ± 3.18	.033	.992	
	General functioning	26.61 ± 5.11	23.50 ± 4.96**	23.29 ± 4.87***	23.39 ± 4.94**	6.53	.001	
	Mach Scale IV	55.07 ± 12.20	68.04 ± 8.44***	68.21 ± 8.43***	68.21 ± 8.43***	26.22	.000	
		88.93 ± 16.95	83.82 ± 13.63**	83.82 ± 13.63**	83.82 ± 13.63**	3.94	.011	

Notes: * *p* < .05, ** *p* < .01, *** *p* < .001 versus preintervention.

TABLE 3
THE CONTROL GROUP'S SCORES BEFORE AND AFTER INTERVENTION (*M* ± *SD*)

Index	Pre-intervention	Baseline	Post-intervention 1 month	3 month	<i>F</i>	<i>p</i>
OCS						
Social comfort	45.70 ± 11.16	39.04 ± 8.28***	39.00 ± 8.23***	39.09 ± 8.02***	6.826	.000
Loneliness/depression	17.39 ± 4.86	13.70 ± 4.58***	13.70 ± 4.34***	14.04 ± 4.45***	8.775	.000
Diminished impulse control	36.70 ± 1.07	29.22 ± 9.40***	29.61 ± 9.19**	29.22 ± 9.25***	6.843	.000
Distraction	31.74 ± 7.78	23.61 ± 6.75***	23.74 ± 6.63***	23.48 ± 6.76***	12.761	.000
OCS total	131.52 ± 27.90	105.57 ± 21.65***	106.04 ± 2.99***	105.82 ± 2.84***	11.461	.000
FAD						
FAD problem solving	13.30 ± 2.29	13.22 ± 1.68	13.26 ± 1.74	13.35 ± 1.90	.038	.99
Communication	21.52 ± 4.07	2.74 ± 3.18	2.74 ± 3.19	2.74 ± 3.12	.917	.438
Roles	24.91 ± 3.95	25.74 ± 2.96	25.74 ± 2.86	25.78 ± 2.94	1.428	.243
Affective responsiveness	14.22 ± 2.92	14.09 ± 2.57	14.09 ± 2.50	14.26 ± 2.60	.211	.888
Affective involvement	16.61 ± 2.81	16.83 ± 2.82	16.78 ± 2.88	16.87 ± 2.65	.099	.960
Behavior control	19.91 ± 3.01	2.30 ± 2.62	2.39 ± 2.31	2.35 ± 2.27	.424	.736
General functioning	26.30 ± 4.99	27.48 ± 5.66	27.70 ± 5.72	27.65 ± 5.41	1.643	.188
PSSS						
Mach Scale IV	55.91 ± 1.71	59.61 ± 1.08*	59.35 ± 9.84*	59.57 ± 9.97*	2.551	.063
	9.39 ± 14.95	86.65 ± 15.44	86.61 ± 15.54	86.78 ± 15.18	.866	.011

Notes: * *p* < .05, ** *p* < .01, *** *p* < .001 versus preintervention.

COMPARISON OF DIFFERENT EFFECTS BETWEEN EXPERIMENTAL AND CONTROL GROUPS 3 MONTHS AFTER THE INTERVENTION

The variations between experimental and control groups in terms of age, gender, educational background, average time spent online daily, and OCS total score before intervention were not statistically significant ($p > .05$), so a comparison of intervention effects is feasible. The scoring variations between the experimental and control groups in terms of total scores and social comfort of OCS, roles, general functioning scales in FAD, and PSSS total score 3 months after the intervention were statistically significant (Table 4).

TABLE 4
COMPARISON OF SCORES IN ALL SCALES BETWEEN EXPERIMENTAL AND CONTROL GROUPS 3 MONTHS AFTER INTERVENTION ($M \pm SD$)

	Scale	Experimental ($n = 28$)	Control ($n = 23$)	t
OCS	Social comfort	33.96 \pm 9.69*	39.09 \pm 8.02	-2.03*
	Loneliness/depression	13.07 \pm 3.92	14.04 \pm 4.45	-.83
	Diminished impulse control	24.61 \pm 7.78	29.22 \pm 9.25	-1.93
	Distraction	19.93 \pm 6.64	23.48 \pm 6.76	-1.88
	OCS total	91.57 \pm 24.29*	105.82 \pm 2.84	-2.22*
FAD	FAD problem solving	12.61 \pm 2.13	13.35 \pm 1.90	-1.30
	Communication	19.04 \pm 3.62	2.74 \pm 3.12	-1.78
	Roles	23.86 \pm 3.40*	25.78 \pm 2.94	-2.13*
	Affective responsiveness	13.18 \pm 2.63	14.26 \pm 2.60	-1.47
	Affective involvement	15.71 \pm 2.64	16.87 \pm 2.65	-1.55
	Behavior control	19.57 \pm 3.18	2.35 \pm 2.27	-.98
	General functioning	23.39 \pm 4.94**	27.65 \pm 5.41	-2.94**
PSSS		68.21 \pm 8.43**	59.57 \pm 9.97	3.36**
	Mach Scale IV	83.82 \pm 13.63	86.78 \pm 15.18	-.73

Notes: * $p < .05$, ** $p < .01$ versus control.

DISCUSSION

In our primary investigation, we found that total OSC scores are positively correlated with emotion involvement subscale scores in relation to family functioning, and this indicates that the more serious the negative affective involvement in the family, the more severe the degree of Internet addiction experienced by the adolescents (Xin, Ran, & Sha, 2009). As such, this study was designed to examine the effectiveness of a family-based group intervention model for young people with Internet addiction. The most prominent characteristic of this intervention model was that we did not intend to directly interfere with the addictive behavior, but rather to focus on how to enhance family functioning in that the group intervention we designed was not only for young people, but also for their parents. In addition, our study was carried out using a sample of in-patients, which reduced drop-out rates in the intervention process.

The results showed that, in the experimental group, the scores on the subscale of communication, roles, affective responsiveness, general functioning, the comprehension of social support, and interpersonal trust for FAD improved significantly. Moreover, scores on the subscales of social comfort, loneliness/depression, diminished impulse control, and distraction for OCS and the total score for OCS improved significantly. Therefore, with improving family functioning, Internet addiction is also reduced. These results provided support for the examination of family environment, which serves as a predictor of adolescent Internet addiction (Nam, 2002; Young, 1999a). Results also suggested the importance of improving family functioning in the intervention programs for treating Internet addiction.

A family is a relatively independent unit and system in society. The interactions and interrelations among individuals in this system have a huge influence on adolescents, who are in a crucial phase of physiological maturation and mental growth. When family functioning is poor, for example in the case of a bad marital relationship or poor parent-child communication, young people may seek love and relationships in the virtual world. Via the Internet, they may establish many virtual relationships, gain a temporary sense of affection, inclusion, and belonging (Kim & Haridakis, 2009). All of these behaviors and positive feelings contribute to the danger of Internet addiction.

In the control group, social comfort and loneliness/depression diminish impulse control and increase distraction, and the overall situation in individual online cognition significantly improved. However, possible influencing factors, such as family function, social support, and interpersonal trust, were not improved. Because in conventional treatment most interventions were focused on treating only the addictive behavior, in the control group there was no significant difference in scores for functions before and after the intervention. Although our study design did not include a longer follow-up, we predict that the intervention effect will be more difficult to maintain and the possibility of addiction recurrence is relatively high.

In this study, according to the results of the 3-month follow-up, the differences between the experimental and the control groups in terms of the scores on the social comfort subscale for OCS and OCS total, FAD total, and PSSS total are statistically significant. This further indicated that the effects of family-based intervention on the experimental group are more likely to persist and may be related to a better recovery of family functioning and more obvious improvement of social support. The former change reduces one of the most important risk factors of Internet addiction and can provide a better family environment for adolescents. The latter change enhances a protective factor of Internet addiction and improves the ability of Internet-addicted adolescents to build relationships. Overall, these two improvements provide powerful support for maintaining

intervention effects and reducing the possibility of reoccurrence after the young people complete treatment and return to the family and society.

Nevertheless, there are limitations to this study. First, the sample size was small; it would be desirable if a larger sample could be recruited for future studies. Second, because many patients came from all over the country, toward the end of treatment, many of them left the hospital. That increased the difficulties of long-term follow-up, so the time period we allowed ourselves was short and the after-effects of this intervention model could not be sufficiently measured.

Despite these limitations, the results clearly suggest that participants in the family-based intervention program displayed positive changes as far as Internet use and family functioning are concerned. These findings suggest the importance of improving family functioning in the intervention programs for adolescents. Therefore, it is our hope that this study can help not only Internet-addicted young people, but can also provide a reference for any intervention regarding the mental health and growth of young people in China.

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