

# The Relationship between Mobile Internet Addiction and Parental Control

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*บทคัดย่อ* - การวิจัยเกี่ยวกับความสัมพันธ์ระหว่างการใช้โทรศัพท์มือถือและการควบคุมโดยผู้ปกครองได้ทำการสำรวจประชากรกลุ่มตัวอย่างที่มีอายุระหว่าง 22-21 ปีจำนวน 400 คน ที่อาศัยอยู่กับผู้ปกครอง การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษาความสัมพันธ์ระหว่างบทบาทของผู้ปกครองกับการเสพติดอินเทอร์เน็ต ประเภทของการเสพติดที่มีอัตราการวัดด้วยจำนวนชั่วโมงต่อวันคือ การใช้งานสื่อสังคมออนไลน์ การเล่นเกม การค้นหาข้อมูลทางอินเทอร์เน็ต การอ่านข้อมูลบนอินเทอร์เน็ตและการพูดคุยโดยใช้โทรศัพท์มือถือ สถิติที่ใช้ในการวิเคราะห์ความสัมพันธ์คือไคสแควร์ ผลการวิจัยพบว่าบทบาทของผู้ปกครองมีความสัมพันธ์กับพฤติกรรมการเสพติดอินเทอร์เน็ตในระดับปานกลางและระดับต่ำ ความสัมพันธ์ระดับปานกลางสูงสุดคือระหว่างการควบคุมเนื้อหาสำหรับผู้ปกครองและกิจกรรมในการสนทนาทางโทรศัพท์มือถือต่อวัน ส่วนความสัมพันธ์ระหว่างการควบคุมเวลาของผู้ปกครองที่มีความสัมพันธ์มากที่สุดคือเวลาในการเล่นเกมส์ ข้อเสนอแนะจากการวิจัยคือผู้ปกครองยังคงมีความสำคัญในการลดความเสี่ยงต่อการเสพติดอินเทอร์เน็ตในกลุ่มผู้เยาว์ด้วยการเข้าร่วมกับวิธีการอื่น ๆ และควรได้รับคำแนะนำจากนักจิตวิทยา ผลจากการวิจัยสามารถนำมาใช้ในการสร้างแบบจำลองการระบุ / การป้องกัน / การรักษาสำหรับผู้เสพติดอินเทอร์เน็ตและใช้เป็นแนวทางในการทำความเข้าใจและแก้ไขปัญหาดังกล่าว

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*Abstract*— Research on the relationship between mobile internet addiction and parental control has conducted survey with the sample populations of 400 Thai youths aged between 18-21 yrs. who lives with parents. The purpose is to study the relationship of parental role and the addiction of mobile internet. The type of addictions measure per day are: Hours of Social Media usage, Game hours, Number of hours searching the net, Number of hours of reading on the net, and Number of hours of mobile phone talk. The statistics used in relationship analysis is Chi-Square. The study indicated that the roles

of parents were correlated with most of Internet addiction activities at significant moderately level and lower. The highest moderate relationship are between parental content control and activity in mobile phone talk per day and so the relationships between parental time control and game hours. The suggestion from the research is that parents are still important in reducing the risk of Internet addiction in youth by implementing with other methods and getting some advices from a psychologist. The result could be used to construct the identification/ prevention/ treatment model for the addict and used as a guideline for understanding and solving such problems.

*Keywords:* Parental Control; Internet Addiction; Thai Youth; Addict; Treatment

## I. INTRODUCTION

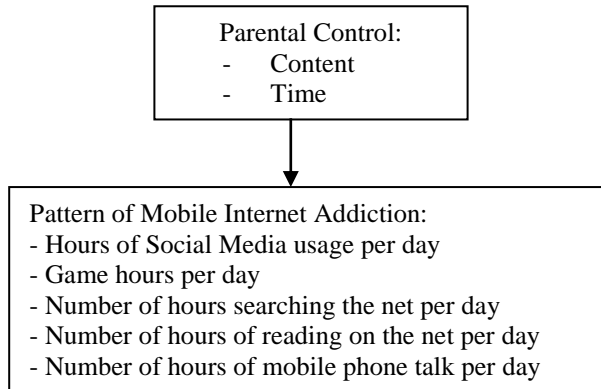
The internet addiction is the term to call the internet user behavior that spends more time on the internet as much so they have a problem in relationship, academic, career, and financial [1]. There are many studies to address this problem since early 2002s. Finally they suggested developing of impatient treatment facilities for the people who considered having internet addiction problem [2]. The problem is increasing in every part of the world. In Chia, they established the treatment center in 2006 and in US the center are founded at the same year. The studies emphasize the problem of internet addiction more in Asian country than in European [3,4]. The popular use of smart phone is the factor to stimulate this problem because they can get connection to the internet more convenience. So the problem can be more specific as Mobile Internet Addiction.

In Thailand, we believe to have mobile internet addiction problem but there are few studies on this problem. The treatment for this specific emotional disorder is acceptable as a problem. This research has the purpose to investigate that whether there is such a problem in Thai society or not. To be more emphasizing, the research will study into how the parental guide affecting the internet addiction behavior. With believe in the family institution that will help society to solve individual problem. The research result could create awareness of Thai society in the internet addiction problem. Also as to

find the proper way to reduce the risk of starting from a smallest unit that is family and parental guidance.

## II. CONCEPTUAL FRAMEWORK

The research hypothesis stated that the different parental guide affect different the pattern of mobile internet addiction in Thai youth (Hours of Social Media usage per day, Game hours per day, Number of hours searching the net per day, Number of hours of reading on the net per day, and Number of hours of mobile phone talk per day).



## III. LITERATURE REVIEW AND RELATED STUDIES

The internet addiction is getting more acceptable as one of the mental illness that needs treatment in several country (US, China, and Korea). The research works are done to find the cause /effect/prevention and treatment in order to reduce the problem. With some surprisingly, the Diagnostic and Statistical Manual of Mental Disorders, the fifth edition [5] still not considered as a formal and unique disorder, just accept as a specified. The problem of internet addiction has arisen especially in Asia, with 19.8% for adolescents in Taiwan, 20.3% in South Korea, 13.7% in China. The report from Western countries is very low as 2.0% for Norway. The explanation of the differences might be from the source of culture. Most of the study has investigated the family factors affecting internet addiction as parenting style and family function. Four components that are the characteristics of internet addiction are as follows according to [6]:

1. Excessive Use: the addiction will overuse the internet and spend less time in normal activity such as work or study. When they cannot control the internet usage, we called that Pathological Internet Use (PIU).
2. Stopped Behavior: when there is no internet access, the addict will have the feeling of anger and depression.
3. Tolerant Behavior: the addict will always ask for more advance computer resources.
4. Negative Impact: the emotional results that cause argument, poor achievement, fatigue, and social isolation.

Problem that could arise from using too much internet time as an internet addiction are the following:

1. Relationship Problem: There are lot of family that end up their marriage from having an affair by someone they meet online [7]. In the school environment, the student who spends overwhelming time on internet will have less interested in friends and family.
2. Financial Problem: By spending too much expense on the internet connection fee to engage such internet activities for example: on-line game, gambling, pornography movies, subscriber to the website and applications.
3. Academic Problem: The student who spends unreasonably time on internet will have less time to study. As a result they will have problem in catch up and understand with the class contents.
4. Career Problem: In working environment, when the employee addicted to internet, they used the organizational resources for their own. They will also append less effort on their job and lower the relationship among co-worker.

Parental style has three different characteristics according to [8] as the followings:

1. Emotional warm: with supporting children in emotional supported for example "My parent praised me."
2. Rejection: the parenting style of punishing even a small mistake.
3. Overprotection: the parenting style that interfere with everything that their children did.

The study about positive parental control over the smartphone addiction in China found the relationship between parental style and reducing of smartphone addiction. The parental style consists of 42 items from the short-Egna Minnen av Barndoms Uppfostran-Chinese such as emotional warmth, overprotection, and rejection. The result found that negative parental style will increase smartphone addiction and it is the same result from [9]. The study on parents, school, and peers impact internet game addiction [10] has conclusion that there are relationship among them. A parent-adolescent relationship still plays an important influence on the game addiction. They also suggest developing an integrative framework to prevent the game addiction. The study [11] on the effect of parental marital conflict and internet addiction for the college student in China found that both variables have a relationship. They suggested having educator to pay more attention to the youth's parent-child attachment. Another study by [12] found that emotional insecurity partially mediated the association between interparental conflict and internet addiction. Finally they suggested investigating into the emotional insecurity of the adolescent whose parents have conflict as the at-risk group of addict. The study [13] found that teacher-student relationship was negatively associated with internet addiction. They also suggest to study of how positive relation between teacher and student be on the addicted person.

The study on Attention-deficit / hyperactivity disorder (ADHD) and internet addiction in Taiwan [14] found that the internet addiction prevalence decreased after implementing prevention screening program. The program use e Chen Internet Addiction Scale (CIAS), the Chinese version of the Autism Spectrum Quotient (AQ) for autistic trait, the Parental Bonding Instrument(PBI) for parenting, the Family APGAR for family support, the Social Adjustment Inventory for Children and Adolescents for social function, and the Swanson, Nolan, and Pelham. The research suggested of predictor factors are male, low family support, poor social adjustment, and high ADHD-related symptom. In other group, the factors affect internet addiction is poor academic performance, male, and protective parenting style. The study result could be used in developing prevention program for internet addiction in Taiwan.

The Inpatient Treatment Center (ITC) is name after the facility that founded to solve the problem of internet addiction. The center aims to reduce the risk and treat the youth to recover from such psychological problem. In Asian countries, there are more approaches than in US or European. Korea is the first to have national master plan to take care of this problem. The national screening day has set up to identify the group of student at risk by having an early prevention program in school. They also have hundreds of impatient unit spread out the cities for the treatment of addiction [15]. The center applies the concepts of digital diet and digital nutrition which believe to help patients with healthy way of using technology [16].

The study [17] on the effect of life satisfaction on the internet and social media addiction found that life satisfaction plays important role in reducing both social media and internet addiction. The issue for satisfaction in an addicted individual is come from their live, lowering the satisfaction, and the drive to continue usage. The research from Turkey [18] on the mediation effect for the internet addiction among young adult found the importance relationship. The at-risk group of internet addiction has lower level of mindfulness and forgiveness than the addicted group. They also have higher level in psychological maltreatment. The suggestion from the study is about the implementation of mental health service. The research from China [19] found the impact of internet addiction on the risk of prevalent depression through its direct, mediator, and moderation effects. They suggested enhancing the understanding in depression prevention, screen and intervention for addiction, cultivating protective factor, and unlinking the negative impacts. The study on internet addiction [20] indicated the findings as the impact of parental monitoring on internet addiction was partially mediated by deviant peer affiliation. They also suggested the need to consider family, peer, and individual factors in order to prevent the internet addiction.

IV. ANALYSIS OF DATA

Analysis of data according to each category using descriptive statistics display in table 1-4.

TABLE 1. DISPLAY PERCENTAGE FOR THE CATEGORY OF INTERNET ADDICTION BEHAVIOR

Internet addiction behavior	Yes (%)	No (%)
1. Overwhelmed by the Internet.	56.0	44.0
2. Feel the need to spend more time on Internet.	69.0	31.1
3. Cannot control the time of using Internet very often.	38.0	62.0
4. Feel desperate, angry, under pressure, when stop using.	32.2	67.8
5. Spend more time on the internet than expect.	68.0	32.0
6. Loss of social relationships, career learning.	29.0	71.0
7. Lied or concealed family, friends, and neighbors	25.0	75.0
8. Use the Internet as a way to avoid problems.	70.0	30.0

The survey on pattern of internet addiction is the pre-question for screening the respondents to see if they are considered one of the addicts. The answer “Yes” at least 4 out of 8 questions is underlined as internet addiction. After filter out the non-addicted group, the questionnaires are answered. The top three most behaviors are using the Internet as a way to avoid problems, feeling the need to spend more time on Internet, and spending more time on the internet than expect.

TABLE 2. DISPLAY PERCENTAGE OF DEMOGRAPHIC DIFFERENCES

Demographic Category	(%)	Demographic Category	(%)
Gender		Education	
Male	44.0	<High School	1.5
Female	56.0	Vocational	3.0
Age		Bachelor	95.5
18 years	5.2		
19 years	11.8		
20 years	42.0		
21 years	41.0		

Most of the respondents are female, 20 years old, and in Bachelor degree study.

TABLE 3. DISPLAY MEANS AND STANDARD DEVIATION FOR THE CATEGORY OF PARENTAL CONTROL

Parental Control	$\bar{x}$	S.D.	Meaning	Order
1.Content	2.87	1.062	Sometimes	1
2. Time	2.76	1.106	Sometimes	2
Total	2.82		Sometimes	

The parents are sometimes taking control over the youth internet usage. The content control is much often. As the respondents are adolescents, the parental control “sometimes” is considered reasonable for the research.

TABLE 4. DISPLAY MEANS AND STANDARD DEVIATION FOR THE CATEGORY OF MOBILE INTERNET ADDICTION PATTERN

Activities other than work or study	$\bar{x}$	S.D.	Meaning	Order
1. Hours of Social Media usage per day	3.90	0.810	Often	1
2. Game hours per day	3.38	1.016	Sometimes	4
3. Number of hours searching the net per day	3.54	0.825	Often	2
4. Number of hours of reading on the net per day	3.50	0.823	Often	3
5. Number of hours of mobile phone talk per day	3.04	1.154	Sometimes	5
Total	3.47		Often	

The survey gives us the conclusion of social media addiction. Since the most time spend on the social media more than other activities are recognized. We should pay more attention to look carefully with the usage on social media. For the mobile talk, the decreasing number of time spend has been noticed, because the adolescent use other communication channel such as line application.

**Hypothesis 1:** The parental control is associated with the pattern of mobile internet addiction.

**Hypothesis 1.1:** The parental content control is associated with the pattern of mobile internet addiction.

Next section, the research hypothesis will be tested.

TABLE 5. DEMONSTRATE THE RELATIONSHIP BETWEEN PARENTAL CONTENT CONTROL AND HOURS OF SOCIAL MEDIA USAGE PER DAY

Parental Content Control	Never	Seldom	Sometimes	Often	Almost always
Never	0	3	7	31	14
Seldom	0	3	26	25	21
Sometimes	1	3	60	56	33
Often	0	2	18	65	17
Almost always	0	1	1	1	12
<b>Statistics</b>					
$\chi^2$	Cramer's V		Sig.		
60.396	0.202		0.000*		

\* Significant at the statistical level 0.05

From the analysis found that the parental control over the content has a relationship with Hours of Social Media usage per day at significant level 0.05 (Sig.= 0.000) with the moderate level of relationship (Cramer's V=0.202). The relationship is acceptable.

TABLE 6. DEMONSTRATE THE RELATIONSHIP BETWEEN PARENTAL CONTENT CONTROL AND GAME HOURS PER DAY

Parental Content Control	Never	Seldom	Sometimes	Often	Almost always
Never	5	8	15	15	12
Seldom	6	15	22	22	10
Sometimes	5	19	81	37	11
Often	2	7	32	44	17
Almost always	0	1	1	8	5
<b>Statistics</b>					
$\chi^2$	Cramer's V		Sig.		
53.026	0.182		0.000*		

\* Significant at the statistical level 0.05

From the analysis found that the parental control over the content has a relationship with Game hours per day at significant level 0.05 (Sig.= 0.000) with the weak level of relationship (Cramer's V=0.182). The relationship is minimally acceptable.

TABLE 7. DEMONSTRATE THE RELATIONSHIP BETWEEN PARENTAL CONTENT CONTROL AND NUMBER OF HOURS SEARCHING THE NET/ DAY

Parental Content Control	Never	Seldom	Sometimes	Often	Almost always
Never	0	8	25	18	4
Seldom	2	15	26	26	6
Sometimes	0	9	70	61	13
Often	0	2	34	49	17
Almost always	0	1	0	9	5
<b>Statistics</b>					
$\chi^2$	Cramer's V		Sig.		
53.937	0.184		0.000*		

\* Significant at the statistical level 0.05

From the analysis found that the parental control over the content has a relationship with Number of hours searching the net per day at significant level 0.05 (Sig.= 0.000) with the weak level of relationship (Cramer's V=0.184). The relationship is minimally acceptable.

TABLE 8. DEMONSTRATE THE RELATIONSHIP BETWEEN PARENTAL CONTENT CONTROL AND NUMBER OF HOURS READING ON THE NET/DAY

Parental Content Control	Never	Seldom	Sometimes	Often	Almost always
Never	1	5	29	8	12
Seldom	0	11	40	22	2
Sometimes	0	8	87	43	15
Often	0	7	25	52	18
Almost always	0	0	6	5	4
<b>Statistics</b>					
$\chi^2$	Cramer's V		Sig.		
61.036	0.195		0.000*		

\* Significant at the statistical level 0.05

From the analysis found that the parental control over the content has a relationship with Number of hours of reading on the net per day at significant level 0.05 (Sig.= 0.000) with the weak level of relationship (Cramer's V=0.195). The relationship is minimally acceptable.

TABLE 9. DEMONSTRATE THE RELATIONSHIP BETWEEN PARENTAL CONTENT CONTROL AND NUMBER OF HOURS OF MOBILE PHONE TALK PER DAY

Parental Content Control	Never	Seldom	Sometimes	Often	Almost always
Never	16	15	10	9	5
Seldom	12	20	26	11	6
Sometimes	17	30	64	37	5
Often	4	11	16	57	14
Almost always	0	0	7	2	6
<b>Statistics</b>					
$\chi^2$	Cramer's V		Sig.		
1.107	0.263		0.000*		

\* Significant at the statistical level 0.05

From the analysis found that the parental control over the content has a relationship with Number of hours of mobile phone talk per day at significant level 0.05 (Sig.= 0.000) with the moderately level of relationship (Cramer's V=0.263). The relationship is strong and desirable acceptable.

**Hypothesis 1.2:** The parental time control is associated with the pattern of mobile internet addiction. Next section will be tested hypothesis 1.2.

TABLE 10. DEMONSTRATE THE RELATIONSHIP BETWEEN PARENTAL TIME CONTROL AND HOURS OF SOCIAL MEDIA USAGE PER DAY

Parental Time Control	Never	Seldom	Sometime	Often	Almost always
Never	0	6	5	39	21
Seldom	0	0	19	27	26
Sometimes	1	2	63	60	30
Often	0	4	23	47	9
Almost always	0	0	2	5	11
<b>Statistics</b>					
$\chi^2$	Cramer's V		Sig.		
65.878	0.203		0.000*		

\* Significant at the statistical level 0.05

From the analysis found that the parental control over the time has a relationship with Number of hours of Social Media usage per day at significant level 0.05 (Sig.= 0.000) with the moderately level of relationship (Cramer's V=0.203). The relationship is acceptable.

TABLE 11. DEMONSTRATE THE RELATIONSHIP BETWEEN PARENTAL TIME CONTROL AND GAME HOURS PER DAY

Parental Time Control	Never	Seldom	Sometimes	Often	Almost always
Never	10	12	12	19	18
Seldom	5	14	33	11	9
Sometimes	2	16	78	50	10
Often	1	8	22	38	14
Almost always	0	0	6	8	4
<b>Statistics</b>					
$\chi^2$	Cramer's V		Sig.		
75.188	0.217		0.000*		

\* Significant at the statistical level 0.05

From the analysis found that the parental control over the time has a relationship with Game hours per day at significant level 0.05 (Sig.= 0.000) with the moderately level of relationship (Cramer's V=0.217). The relationship is acceptable.

TABLE 12. DEMONSTRATE THE RELATIONSHIP BETWEEN PARENTAL TIME CONTROL AND NUMBER OF HOURS SEARCHING THE NET PER DAY

Parental Time Control	Never	Seldom	Sometimes	Often	Almost always
Never	1	8	31	24	7
Seldom	1	10	26	25	10
Sometimes	0	11	78	52	15
Often	0	5	18	52	8
Almost always	0	1	2	10	5
<b>Statistics</b>					
$\chi^2$	Cramer's V		Sig.		
42.989	0.164		0.000*		

\* Significant at the statistical level 0.05

From the analysis found that the parental control over the time has a relationship with Number of hours searching the net per day at significant level 0.05 (Sig.= 0.000) with the weak level of relationship (Cramer's V=0.164). The relationship is minimally acceptable.

TABLE 13. DEMONSTRATE THE RELATIONSHIP BETWEEN PARENTAL TIME CONTROL AND NUMBER OF HOURS OF READING ON THE NET PER DAY

Parental Time Control	Never	Seldom	Sometimes	Often	Almost always
Never	0	3	39	20	9
Seldom	0	4	32	24	12
Sometimes	1	19	79	39	18
Often	0	5	29	44	5
Almost always	0	0	8	3	7
<b>Statistics</b>					
$\chi^2$	Cramer's V		Sig.		
41.809	0.162		0.000*		

\* Significant at the statistical level 0.05

From the analysis found that the parental control over the time has a relationship with Number of hours of reading on the net per day at significant level 0.05 (Sig.= 0.000) with the weak level of relationship (Cramer's V=0.162). The relationship is minimally acceptable.

TABLE 14. DEMONSTRATE THE RELATIONSHIP BETWEEN PARENTAL TIME CONTROL AND NUMBER OF HOURS OF MOBILE PHONE TALK PER DAY

Parental Time Control	Never	Seldom	Sometime	Often	Almost always
Never	15	18	16	17	5
Seldom	19	8	21	19	5
Sometimes	11	34	58	44	9
Often	4	15	23	32	9
Almost always	0	1	5	4	8
<b>Statistics</b>					
$\chi^2$	Cramer's V		Sig.		
67.593	0.206		0.000*		

\* Significant at the statistical level 0.05

From the analysis found that the parental control over the time has a relationship with Number of hours of mobile phone talk per day at significant level 0.05 (Sig.= 0.000) with the moderate level of relationship (Cramer's V=0.206). The relationship is acceptable.

#### V. CONCLUSION

The parental content control has the highest relationship with time spend in mobile talk when compare with other addiction pattern. May be this activity is obvious to the parent while the adolescent are talking, so they try to avoid the conflict by doing less. Anyway they still have the communication by other channel. The relationship between parental time control and Game hours per day is the highest one when compare with other activities. This is a positive sigh of parental role. The addicts tend to spend less time of game if they are aware of parental control. The research suggested of how important the role of parent control over both content and time for internet addiction. The parent should play an important part to be aware of the internet addiction while the adolescent are staying with them. The parent should spend time talking with them about the time and content of internet usage, with the positive parental style and virtue, this will help reducing the risk for internet addiction.

The positive parental style could decrease a problem of internet addiction. The positive style provide the youth with emotional warmth leading to more happiness. To be more effectively, the parental style should combine with virtue. In other side, if parent use negative style and punishment, this will result in children feeling less happiness. The suggestion will also use with the youth in the guardian of parent as well.

Thailand could learn more on how to reduce and treat problem of internet addiction from Korea. We should create awareness among parent and school teacher since they are closed to children at their early age. From the

study, we found that there are relationship between parental role and pattern of addiction. At the beginning, we should promote the parental guidance even with the college student. Finally, we should develop the model and implement them as a method to early detect mobile internet addiction problem among youth group.

The implication from the research could benefit the administrator and educator. The institution should educate parent about the risk from internet addiction such as emotional disorder, relationship problem, financial, academic, and career problem. To form a model that helps them early identify the symptom of internet addiction at home or school. Finally, the addict should be properly treated by the health institution that understand very well and has an expert of this problem.

## VI. LIMITATION AND FURTHER STUDY

This research has done by using population in the metropolitan area of Thailand. The result could be different if the population will be the resident of country side. The parental role might have more level of relationship than in the city since the varied cultural. We suggest having comparison for that in order to develop a general preventive/treatment that could be applied more effectively in Thailand.

To emphasize in parental style, the further study should investigate into both negative and positive of style to see the balance implementation of them. Also need to study the virtue of adolescent and parent which might affect their behavior toward the internet usage.

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