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TITLE: Measurement of Internet Addiction

Measurement of Internet Addiction



2. Measurement of Internet Addiction

Diagnosis of addiction level


Measurement of Internet addiction

- Self test for Adolescent : 15 items
- Diagnosis by 3rd party for Adolescents : 15items
- Self test for Adults : 15 items
- Diagnosis by 3rd party for Child : 15items

Measurement of Smart Phone Addiction

- Self test for adult : 15 items
- Self test for Adolescents : 15 items

Measurement of Game Addiction

- Diagnosis by 3rd party for Adolescents : 18items
 - Self test for adult : 20 items
 - Self test for Adolescents : 20 items
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Components of Internet Addiction Scale

- **Disturbance in daily life(factor 1)**

- Problems in school(or work) life
- Health problems (lack of sleep)
- Conflict with family
- Time management problems



- **Cyber world oriented (factor 2)**

- More priority on cyber world than real world
- dependence on online relationship



- **Withdrawal symptom(factor 3)**

- Feel depressed when reducing Internet use
- Preoccupied by the Internet
- Irritated or nervous when not accessing the internet



- **Tolerance(factor 4)**

- Need to spend increasingly long hours online
- Internet disorder: not being able to self-control

Internet Addiction Scale for Adolescent(10 to 19)

Factor	Item	Strongly agree	Disagree	Agree	Strongly disagree
1 Disturbance in daily life	1. My health has been deteriorated due to the excessive Internet use	1	2	3	4
	5. I have had a headache because of the excessive use of the Internet	1	2	3	4
	9. I often have not completed the tasks I had planned due to excessive use of the Internet	1	2	3	4
	12. I have lied about my Internet usage hours	1	2	3	4
	15. I have to spend more money because of the excessive use of the Internet	1	2	3	4
2 Cyber space oriented	2. I am recognized more online than offline	1	2	3	4
	6. I feel comfortable more with the people I meet on the Internet than those I meet in real life	1	2	3	4
3 Withdrawal symptom	3. My life will be boring and uninteresting without the Internet	1	2	3	4
	7. I get restless and nervous when I cannot get on the Internet	1	2	3	4
	10. I do not get anxious even after not accessing the Internet for a while.	4	3	2	1
4 Tolerance	13. I can easily forget about the Internet when I am not on the Internet	4	3	2	1
	4. Whenever I get off the Internet, I want to go on it again	1	2	3	4
	8. I try to reduce my Internet hours, but I fail	1	2	3	4
	11. I keep on thinking that I need to cut my Internet hours	1	2	3	4

Internet Addiction Scale (for adolescent)

Criteria for Measuring Internet Addiction(adolescent)

Category	Elementary School Students	Middle & High School Students
High Risk Addicts	Over 42 points in total score or (over 14 points in factor 1 and over 13 points in factor 3 and over 13 points in factor 4)	Over 44 points in total score or (over 15 points in factor 1 and over 13 points in factor 3 and over 14 points in factor 4)
Potential Addicts	39–41 points in total score or over 13 points in factor 1 or over 12 points in factor 3 or over 12 points in factor 4	41–43 points in total score or over 14 points in factor 1 or over 12 points in factor 3 or over 12 points in factor 4

Internet Addiction Scale for Adult(20 to 49)

Factor	Item	Strongly agree	Disagree	Agree	Strongly disagree
1 Disturbance in daily life	1. My school grades(or work productivity) dropped due to excessive use of the Internet	1	2	3	4
	5. Because of my Internet use, I get too tired and fall asleep during class(or work)	1	2	3	4
	6. I often have not completed the tasks I had planned due to excessive use of the Internet	1	2	3	4
	10. I don't use the Internet to the point of getting tired	4	3	2	1
	13. I do finish the tasks I had planned even spending long hours for doing the Internet	4	3	2	1
2 Cyber space oriented	2. I feel confident more and more while doing the Internet	1	2	3	4
	7. I feel good and get easily excited when I am on the Internet	1	2	3	4
3 Withdrawal symptom	3. When not accessing the Internet, I cannot concentrate my tasks because I get curious about what is going on in the Internet	1	2	3	4
	8. I get Irritated when things don't go well when I am on the Internet	1	2	3	4
	11. I get restless and nervous when I cannot get on the Internet	1	2	3	4
	14. I do not get anxious even after not accessing the Internet for a while.	4	3	2	1
4 Tolerance	4. While telling myself "I should get off the Internet" but I always fail to carry it out.	1	2	3	4
	9. I can control my Internet usage hours.	4	3	2	1
	12. When I get on the Internet, I usually stay longer than planned	1	2	3	4
	15. I always thinking about that I should cut my Internet usage hours.	1	2	3	4

Internet Addiction Scale(for adult)

Criteria for Measuring Internet Addiction(adult)

Category	Criteria
High risk Addicts	Over 42 points in total score or (over 14 points in factor 1 and over 12 points in factor 3 and over 13 points in factor 4)
Potential addicts	39-41 points in total score or over 13 points in factor 1
Non-addicts	Less than or equal to 42 points

Factor	Item (Scale for Child, observer rated)	Strongly agree	Disagree	Agree	Strongly disagree
1 Disturbance in daily life	1. The child is on the Internet without eating, resting, or going to the restroom	1	2	3	4
	6. The child uses the Internet even when he or she do other tasks to do	1	2	3	4
	9. The child cannot concentrate on his/her studies and is distracted due to the excessive Internet use	1	2	3	4
	11. The child's life has become irregular due to the excessive use of the Internet s	1	2	3	4
	13. The child's weight has changed because of the excessive use of the Internet	1	2	3	4
2 Cyber space oriented	4. The child looks interested and lively only when he/she is on the Internet	1	2	3	4
	8. The child looks comfortable most when he/she is on the Internet	1	2	3	4
3 Withdrawal symptom	5. When not on the Internet, the child cannot concentrate on his/her own tasks and looks nervous	1	2	3	4
	7. When the child is not allowed to go on the Internet, he/she gets bored and uninterested	1	2	3	4
	3. The child becomes nervous and irritated when he/she is not allowed to get on the Internet	1	2	3	4
	14. The child becomes angry or impatient when he/she is not allowed to get on the Internet	1	2	3	4
4 Tolerance	10. The child has become insensible even to blood splashing scenes in computer game	1	2	3	4
	12. The child promises to restrict his/her Internet usage hours, but usually does not keep the promise	1	2	3	4
	15. The child keeps his planned Internet usage hours well	4	3	2	1
	2. The child often pesters to get on the Internet again soon after finishing	4	3	2	1

Internet Addiction Scale(for child)

Criteria for Measuring Internet Addiction(child)

Category	Criteria
High risk Addicts	Over 44 points in total score or (over 14 points in factor 1 and over 12 points in factor 3 and over 14 points in factor 4)
Potential addicts	40-43 points in total score or over 13 points in factor 1 or over 11 points in factor 3 or over 13 points in factor 4

Characteristics of Internet Addicts

Category	Major Characteristics
High Risk Addicts	<ul style="list-style-type: none"> - Most of relationship are cyber-based - Positive expectation on immoral activities such as hacking - Illusion connected to the Internet even in real situation - Perception of himself as addicts and difficulties in studying or working - Psychologically unstable, difficulties in personal relations - Lack of self control, high impulsiveness - Withdrawal syndrome on Internet activities
Potential Addicts	<ul style="list-style-type: none"> - Slight difficulties on doing everyday lives - Rising of Internet using hours, and dependency on Internet use - Slight difficulties on school or work activities - Most of them think they are not addicted - Arising conflict with family members and co-workers - Easily irritated when not connecting to the Internet - Uncontrolled Internet activities and lack of confidence

2. Status of Internet Addiction

Physical appearance and psychological characteristics of addicts

- Awkward and immature body gesture considering 2nd in middle school, unstable when walking
- not able to see counselor straightly , try to avoid eye contact when seeing the counselor
- Very passive and response inactively to the questions, and talking very little
- Rigid facial expression, lack of confidence, falling down ones head, biting or scrubbing ones hand, looking around pointlessly

2. Status of Internet Addiction

Stage to grow to addiction

1stage

Curiosity

- ◆ Visit chatting room, porno site, do game by curiosity
- ◆ Conduct all of ordinary lives through the Internet
- ◆ Habitual access to the Internet, tool as refreshment

2stage

Substitute Satisfaction

- ◆ tolerance, increased expectation to use Internet
- ◆ Pursue the satisfaction in the Internet which is impossible in real life
- ◆ Express instincts such as violence, adventure, lewdness via Internet
- ◆ Get respect due to excellence in game

3stage

Escape from real world

- ◆ Want to connect the Internet all the time, withdrawal symptom
- ◆ Immersed into cyber-world, difficult to live in real life
- ◆ Denial of real life's social order

K-Scales : National Statistics

The Internet Addiction Survey (Ministry of Science, ICT & Future Planning, National Information Society Agency) has been extended to a larger subject pool and its content improved since the first survey in 2004; it has been conducted annually for 10 years (as of 2013)

◆ National Statistics Approval (Nov. 2006) No. 12019

Category	2004	2005	2006	2007	2008	2009	2010	2011	2012
Target subjects	Uses the Internet at least once a month		Used the Internet at least once in the past month						
Age group	9 to 39 years of age							5 to 49 years of age	
Survey regions	16 cities nationwide								
Sample size	2,000	3,000	3,500	5,500	5,500	6,500	7,600	10,000	15,000
Sampling method	Multi-stage stratified random sampling from the Internet users by region, gender and age		Proportional selection of Internet users according to region, gender and age (weighted sampling) - Minimum assignment per each sampling unit 15 adolescents (2006) → 15 adolescents and 5 adults (2007) → 126 persons per region (2008) → 154 persons (2009) → 230 persons (2010)				Proportional assignment to the power of 0.4 of Internet users according to region, gender and age		
Sampling error (95% confidence level)	±2.7%p	±1.8%p	±1.6%p	±1.32%p	±1.32%p	±1.22%p	±1.12%p	±0.98%p	±0.80%p
Survey method	Door-to-door interview using structured questionnaires								

Development of K-Scales : National Statistics

Larger subject pool

- Age range extended to 5-49 years of age (2011)
→ Based on the increased Internet usage rate across all age groups
- Age range extended to 5-54 years of age (2013)
- Age range to be extended to 5-59 years of age (2014)

Increased sampling

- 2006 to 2008: Calculate the addiction rate in 6 regions nationwide
- 2010 (7,600 subjects): Calculate the addiction rate of each of the 16 cities and provinces
- 2011 (10,000 subjects): Calculate the number of addicts in each of the 16 cities and provinces
- 2012 (15,000 subjects): Sampling of the vulnerable classes

More survey items and enhancement of scales

- 2004 to 2007: Focus on psychological characteristics
- 2008 to 2011: Social characteristics & smartphone addiction
- 2004: Introduction and utilization of Internet Addiction Scales for Youth
- 2006: Introduction and utilization of Internet Addiction Scales for Adults
- 2011: Introduction and utilization of Internet Addiction Scales for Infants & Children; enhancement of Internet Addiction Scales for Youth and Adults

Survey conducted earlier

- 2004 to 2011: Survey conducted on Oct. 1st
- 2012: Survey conducted on Sept. 1st
→ To evaluate the effect of policy implementation and establish new policies for the following year

Highest media and policy report citation rate (34.1%)
Result of the regular quality diagnosis of national statistics in the 10 domestic information and communication utilization survey fields in 2011 by the Statistics Korea

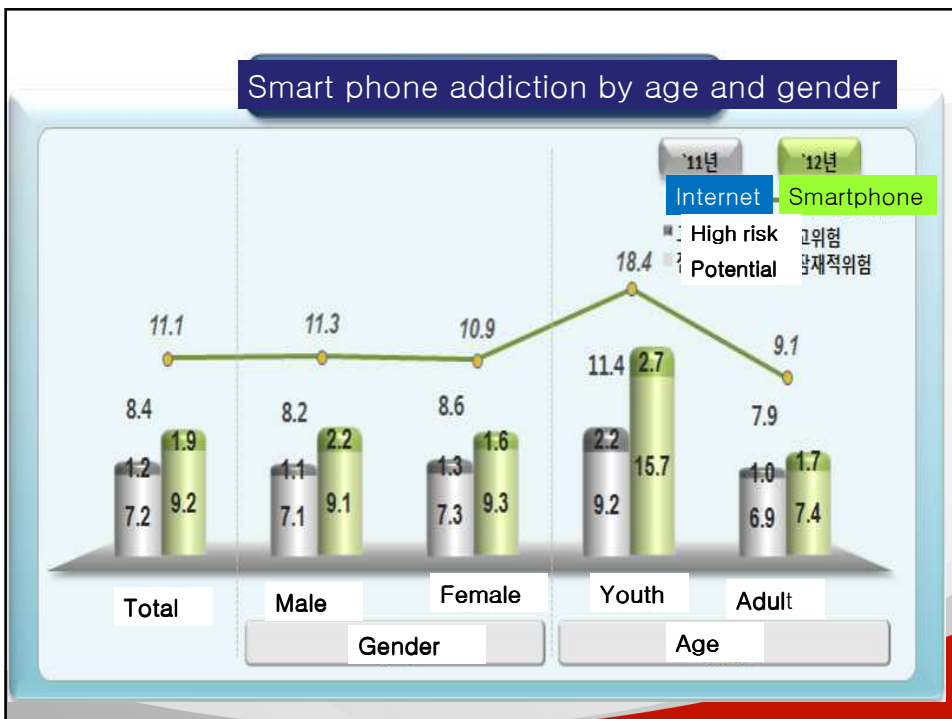
2. Status of Internet Addiction

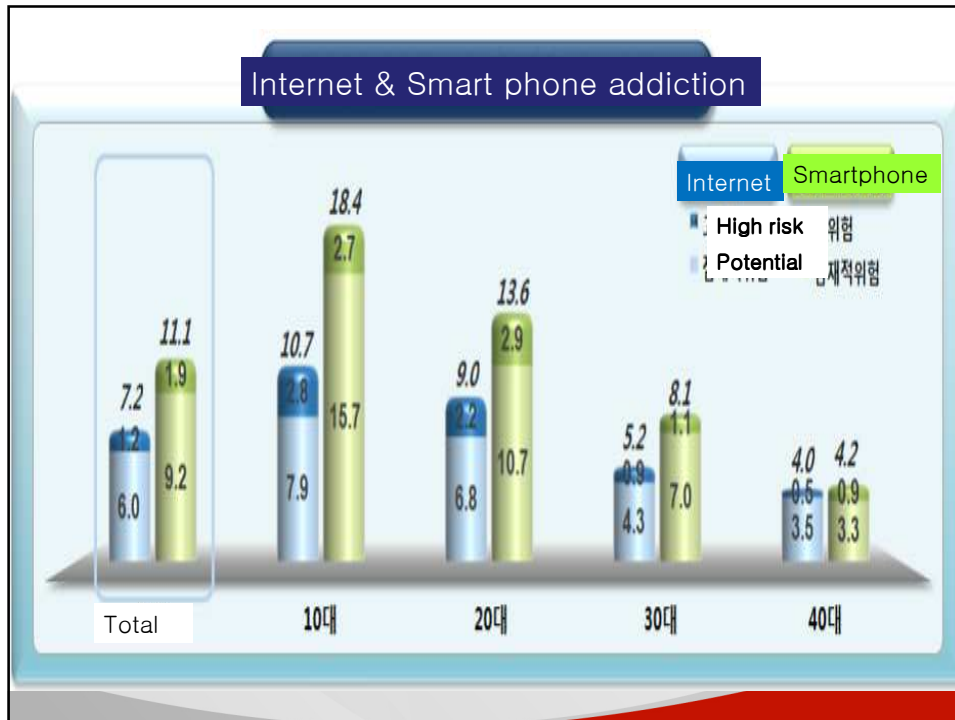
Internet addiction by age and gender

Category	High risk					Potential addict					Internet addiction rate				
	'08	'09	'10	'11	'12	'08	'09	'10	'11	'12	'08	'09	'10	'11	'12
Total	1.6	1.5	1.4	1.7	1.5	7.2	7.0	6.5	6.0	5.7	8.8	8.5	8.0	7.7	7.2
5-9				1.0	0.8				6.9	6.5				7.9	7.3
9-12	1.5	3.2	3.4			10.9	7.9	10.6			12.4	11.1	14.0		
13-15	2.5	2.3	2.1	2.9	2.8	12.5	10.5	9.6	7.5	7.9	15.0	12.8	11.8	10.4	10.7
16-19	2.8	2.1	3.5			13.1	12.5	7.9			15.9	14.6	11.4		
20-24	0.6	0.5	1.3	2.1	2.2	7.7	8.0	8.7	7.1	6.8	8.3	8.5	10.0	9.2	9.0
25-29	1.8	1.2	0.9			6.0	6.4	5.5			7.8	7.6	6.3		
30-34	1.2	1.0	0.5	1.4	0.9	3.9	4.5	4.2	5.5	4.3	5.1	5.5	4.7	6.9	5.2
35-39	1.4	1.2	0.2			3.4	3.3	3.1			4.8	4.5	3.3		
40-49				0.8	0.5				3.9	3.5				4.7	4.0
male	1.7	1.9	1.6	2.2	2.0	8.4	8.2	7.4	6.9	6.5	10.1	10.1	8.9	9.1	8.5
female	1.4	1.1	1.3	1.2	1.0	5.9	5.6	5.6	5.0	4.8	7.3	6.7	6.9	6.1	5.8

Age category of '11 and '12 data is 5-9, 10-19, 20-29, 30-39, 40-49.

Data: The 2011,2012 Survey of Internet addiction(NIA)





2. Status of Internet Addiction

Perception of the Seriousness of Internet addiction('10)


	Category	Very Serious	Somewhat serious	①+②	Somewhat not serious	Never
	Total	24.0	59.8	83.8	14.9	1.3
Addition	Non-addicts	23.7	60.2	83.9	14.8	1.3
	Average of Internet addicts	27.9	54.2	82.1	15.9	1.9
	High risk addicts	31.4	59.0	90.4	9.6	-
	Potential addicts	27.1	53.2	80.3	17.3	2.4
Age	Adolescents	19.6	59.6	79.2	19.1	1.8
	Adults	26.1	59.9	86.0	12.9	1.1
Gender	Male	24.9	58.7	83.6	15.4	1.0
	Female	23.0	60.9	83.9	14.4	1.7

2. Status of Internet Addiction

Main activities by the Internet (multiple answer)('10)

Category	Online Game	E-mail	Chatting / Messenger	information-seeking	Café/Community	Online shopping & banking	Mini homepage /blog	Adult material	Music & movies
High risk	63.3	9.1	47.3	71.7	9.1	27.7	13.3	3.5	35.5
Potential	55.1	14.6	41.0	73.6	9.9	28.6	17.8	1.6	31.3
Non-addicts	40.3	25.0	31.9	82.0	7.6	42.0	16.6	1.0	22.0

o Addicts are more likely to use the Internet for game, chatting, music & movies, but less likely to use e-mail and shopping & banking compared to non-addicts




2. Status of Internet Addiction

Types of online game by gender/grade/year('09) (unit : %)

		No online game	role playing	action/shooting	simulation	casual	racing	sports	puzzle	board	Korean poker	poker	music play, others
year	2007	30.3	33.4	32.9	32.3	19.3	23.3	14.2	10.0	5.4	3.7	1.1	0.1
	2008	32.8	31.2	42.4	31.4	35.4	34.5	21.2	18.2	10.5	11.5	4.5	0.0
	2009	24.9	27.6	45.7	31.4	21.6	29.5	18.6	10.5	8.1	4.5	1.3	6.3
gender	Male	10.1	41.8	67.5	53.0	8.8	29.8	31.9	3.1	5.6	3.8	1.7	5.4
	Female	40.0	13.1	23.6	9.5	34.7	29.3	5.0	18.0	10.7	5.2	0.9	7.2
Age	Ele.	20.8	19.8	41.1	26.1	25.4	35.9	18.7	17.3	11.2	1.3	0.7	11.1
	Middle	21.9	33.6	54.2	37.4	20.1	31.3	17.7	8.3	6.9	4.8	1.3	4.2
	High	32.0	29.3	41.7	30.8	19.4	21.5	19.4	6.0	6.4	7.3	1.9	3.6

o Game users are gradually increasing(69.7%→ 75.1%)
o Action and Shooting game are the most popular, and increasing, and Simulation, racing, role playing are also popular
o More gamer among male, and prefer action/shooting, but women prefer casual



2. Status of Internet Addiction

Types of online game by gender/age/addiction('11) (unit : %) multiple respon

		No online game	role playing	action/shooting	1 person shooting	Strategy/simulation	Web board game	Sports/racing	Web game and social network
year	Non addict	10.7	35.2	16.3	30.9	38.5	40.4	37.4	3.8
	High risk	5.2	46.4	22.6	46.3	45.4	31.3	43.2	13.7
	Potential	5.3	42.5	16.0	36.4	50.2	36.9	40.4	3.6
gender	Male	7.2	40.6	17.4	35.2	46.2	36.8	37.1	3.8
	Female	15.4	27.7	14.2	22.9	27.1	45.5	39.1	4.6
Age	5-9	2.3	26.8	14.8	20.5	18.4	8.3	53.4	1.9
	10-19	3.6	38.2	20.5	35.9	39.7	14.0	51.6	5.7
	20-49	14.5	36.6	14.3	30.1	43.2	59.0	27.8	3.6
Total			36.1	16.3	30.9	39.6	39.8	37.8	4.1

- Male and the Youth are more likely to do online game
- Female are prefer web board game and sports/racing

2. Status of Internet Addiction

Evaluation of online game('09) (unit : %)

	Not at all	disagree	Neutral	agree	absolutely
Bad to health	16.5	17.2	33.0	25.4	7.9
Lots of sexual contents	26.3	21.9	39.2	10.7	3.0
Lots of violent contents	14.1	15.9	35.3	26.6	8.1
Difficult to stop	22.2	25.2	26.4	21.0	5.3
Beneficial	10.2	23.0	49.2	12.4	5.3

Negative attitude on online game (33.3 % said 'bad to health' 13.7% are 'lots of sexual contents', 34.7% said 'lots of aggressive contents' and 26.3% said 'difficult to stop')

only 17.7% said 'beneficial'

More negative attitude on violence than sexuality

2. Status of Internet Addiction

Household Income and Internet Addiction('11)

	Category	Rate of Addiction	High risk	Potential
Monthly household income(USD)	Less than 1,000	8.3	3.9	4.5
	1,000 – less than 2,000	9.1	2.9	6.2
	2,000 – less than 3,000	6.8	1.5	5.3
	3,000 – less than 4,000	7.9	1.5	6.3
	4,000 – less than 5,000	8.2	1.6	6.7
	More than 5,000	6.4	0.8	5.6

2. Status of Internet Addiction

Occupation type and Internet Addiction('11)

	Category	N of cases	Rate of Addiction	High risk	Potential
Occupation	Profession/manager	452	4.2	0.4	3.9
	Office workers	2,117	5.4	0.8	4.6
	Service/sales	1,700	6.7	1.4	5.3
	Agriculture/forestry/fishery	53	2.5	–	2.5
	Manufacturing/Operation	642	8.2	2.7	5.5
	Housewife	1,065	6.1	1.2	4.9
	Students(adult)	3,704	10.3	2.4	7.9
	unemployed	67	10.1	6.0	4.1

2. Status of Internet Addiction

Marital Status and Internet Addiction(adults)('11)

Category	Addiction rate	High risk addicts	Potential addicts
Unmarried	8.7	2.0	6.6
Married	5.7	1.0	4.7

Household type Marital Status and Internet Addiction (youth & unmarried adult)('11)

Category	Addiction rate	High risk addicts	Potential addicts
Extended household	7.1	1.6	5.5
Nuclear household	9.6	2.2	7.4
1 person household	9.1	3.3	5.7

2. Status of Internet Addiction

Parental Status and Internet Addiction(youth)('11)

Category	Addiction rate	High risk addicts	Potential addicts
Single Parent	10.5	2.9	7.6
Parents	9.8	2.4	7.4

2. Status of Internet Addiction

Inter-racial marriage and Internet Addiction(youth)('11)

Category	Addiction rate	High risk addicts	Potential addicts
Inter-racial marriage	11.1	2.7	8.4
Non inter-racial	9.7	2.4	7.3

Dual earner and Internet Addiction(youth)('11)

Category	Addiction rate	High risk addicts	Potential addicts
Dual earner	10.4	3.0	7.4
Single earner	9.3	1.9	7.4

2. Status of Internet Addiction

Use of Smart phone and Internet Addiction('11)

Category		Addiction rate	High risk addicts	Potential addicts
Total	User	9.1	2.1	7.0
	Non-user	6.8	1.5	5.3
Youth	User	12.7	3.3	9.4
	Non-user	9.7	2.8	6.9
Adult	User	8.6	1.9	6.7
	Non-user	5.4	1.0	4.4

Thanks

