

New Trends in the Research of Young People's Digital Life in Mainland China: Case Study of Current Digital Life Status of Citizens of Two Beijing Districts

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Abstracts

Most current studies regarding young people's digital life in Mainland China are descriptive ones, in which young people's attitude towards digital life and their needs for digital life are rarely explored. By use of some data from a case study titled Current Digital Life Status of Citizens of Two Beijing Districts, this thesis shows some results relevant to young people's attitude towards digital life and their needs for digital life. This study shows that young people are more inclined to get information about digital products and services through the Internet, mobile phone Internet and other new media channels. At the same time, getting information and entertainment are the two key demands. They especially like to use the Internet to get information. The result indicates that studies on young people's attitude and their needs are the new trends as well.

Key Words: attitude towards digital life, digital life demands, digital products/services

1.Introduction

In recent years, the topic of 'Digital Life' has attracted a lot of research attention in mainland China. The focus of the majority of the research, however, is on the consumption of goods and services and on the assessment of the level of informatization. Other studies have looked into the relationship between Digital Life and the comfort levels of people's lives, for example examining the relationship between the elderly and the facilities of Digital Life. There have been, however, few studies examining the intimate relationship between Digital Life and the young people.

From as early as the 1990s, the European and American scholars started paying a great deal of research attention to the relationship between informatization and the young people's development and their participation in the society (Silvia Trinka, 1993; J. Hartmann, 1993). In mainland China, however, the number of studies on Digital Life and young people has been limited. Only a small number of commercial projects has been carried out, for example those by TNS, CMI and Enovate. These projects, however, regarded the young people solely as consumer subjects of Digital Life, and addressed the relationship between the young people and Digital Life from the perspective of consumer potential and industrial development. Changes in the young people's worldview and value system, and the importance of their effect on the young people's social life were not addressed by these studies.

Since 2000, one of the authors of this study (Huixin Ke), has been following the impact of Digital Life and information technology on society, for example the development of the Internet, the digital divide, the effect of Digital Life on the creativity of young people and Internet addiction among the youth. In 2011 and 2012, the author headed a research project on the Digital Life of the residents of Haidian and Changping districts of Beijing. The subjects of the study were major

consumers of digital products and services between the ages of 20 and 50. Among the results of this study, those on the current state of Digital Life of young people attracted special attention of the authors. This study used the relevant data in further analysis in order to illustrate the development of the demands of Digital Life and of the young people’s attitude to Digital Life. This study also explains the significance of the results and indicates how this topic can be explored further and in more depth in mainland China.

2.Methodologies

In the recent years the subjects of the research on Digital Life in China have always been the Internet and mobile phones. This study extends the concept of Digital Life to the level of digital household. In the course of this study, the residents’ usage of and demand for sixty-three individual digital products and services, organized into 11 categories, were measured. The 11 categories were: computer, mobile phone, fixed-line phone, the Internet, digital device, digital household appliance, digital household facilities, home office supplies, vehicle-mounted digital device, smart security system and community service facilities. The study used a two-stage sampling method - a combination of quota sampling and intercept interviews at fixed locations. In total, 1,106 valid interviews were completed. The fieldwork took place from the 30th of October until the 20th of November 2011. The target audience, identified as major consumers of Digital Life between the ages of 20 and 50, were drawn by quota for age and sex.

3.Results

3.1 Young people are the main consumers of digital products and rely more on new media to obtain digital products

The results showed that in comparison with other age groups, the residents between the ages of 20 and 30 owned more digital products with higher use intensity.

At the same time, the residents in the 20 - 30 years-old age group were more likely to access information on digital products and services via new media. The close tables among the age groups and 8 different cognitive channels were analyzed by using correlation analysis and results showed all the P-values were smaller than 0.05. When C-values were further considered, however, only the categories of “using computer-based internet” and “surfing the internet with cell phone”, showed C-values higher than 0.16. Therefore, at the 5% significance level, the correlations between age and these two cognitive channels were statistically significant. The younger the group, the more likely it was to use these two channels to find out information about digital products and services (Table 1).

Tab. 1 Percentages of age groups to get information about digital products and services (n=1106)

<u>Channels to get information</u>	<u>20 - 30</u>	<u>31 - 40</u>	<u>41 - 50</u>
Experiences from friends and relatives	45.3%	48.9%	59.0%
Conduct propaganda in districts	8.9%	11.8%	15.5%
Television	65.8%	71.0%	78.0%
Radio	12.0%	18.7%	28.0%

Newspaper	30.8%	36.4%	43.5%
Using computer-based internet	83.8%	80.4%	56.0%
Surfing the internet with cell phone	47.0%	29.3%	17.5%
Education in the school	14.2%	5.0%	7.0%

3.2 Young people show an overall active attitude towards Digital Life

In order to measure the psychological motivation of young people as major consumers of digital products of services, their attitude towards Digital Life was measured using 7-point Likert scale. The scale consisted of 14 statements. Using factor analysis (KMO=0.844, Bartlett’s test of Sphericity=4197.914, $\sigma=0.000$), three factors were identified and named as “positive impact of digital life”, “negative impact of digital life” and “development trend of digital life”, with cumulative contribution of 63%.

The results of the analysis of variance (Table 2) demonstrated a clear difference among the age groups in the area of “positive impact of digital life” (F=7.007, Sig.=0.001).

Tab.2 ANOVA table of attitude towards digital life by groups (n=1106)

<u>Groups</u>		<u>Positive impact</u>	<u>Negative impact</u>	<u>Development trend</u>
	20-30 years-old	6.07	4.76	5.94
	31-40 years-old	5.94	4.74	5.84
Age	41-50 years-old	5.83	4.66	5.73
	F	7.007	0.429	2.414
	Sig.	0.001 **	0.651	0.090

The comparison of the mean scores (table omitted) among 14 attitude statements on the Likert scale showed that young people have higher level of agreement with “positive impact of digital life”, focusing primarily on the convenience in life, study and work provided by Digital Life. Young people appreciate the entertainment value of Digital Life technology and it’s usefulness in improving their life and work efficiency.

3.3 Young people have more demands on the “entertainment function” and “information function” of digital products and services. The demands on the “information function” tend to be concerned with the Internet.

The results indicate that the young people have greater demand for information for “contact via the Internet”, “obtaining information from the Internet” and “free-of-charge internet connectivity in public places”. Moreover, the younger the group, the greater was the demand for the “entertainment function”. The demand was measured by using a 7-point, 27-statement Likert scale. Factor analysis (KMO=0.916, Bartlett’s Test of Sphericity = 11113.977, Sig.=0.000) revealed that 51.8% of variation was accounted for by four factors name as “entertainment function”, “service function”, “control function” and “information function”.

In order to test the differences in the demand for “entertainment function”, “service function”, “control function” and “information function” across the age groups, the

analysis of variance was carried out again as Table 3.

Tab.3 ANOVA table of functional demands by age groups (n=1106)

	Groups	Entertainment	Service	Control	Information
	20-30 years-old	5.50	6.24	5.45	6.20
	31-40 years-old	5.14	6.13	5.37	6.00
Age	41-50 years-old	4.70	6.16	5.19	5.75
	F	53.459	2.201	.283	9.258
	Sig.	.000**	.111	.754	.000**

The results of the analysis of variance showed that the influence of age is manifested mainly in the “entertainment” and the “information” functions.

The analysis of variance of nine statements of the “entertainment function” by the “age” group all showed statistically significant results (Sig.≤0.05, ANOVA table omitted). The percentages among all statements of the “entertainment function” for different age groups are showed at Table 4.

Tab.4 Percentages of age groups choosing the options in entertainment function (n=1106)

Options in the entertainment function	20-30	31-40	41-50
1. I like to watch all the television shows smoothly on the mobile devices, such as mobile phone and PDA	90%	82%	78%
2. I like to browse network videos on the mobile devices, such as mobile phone and PDA	81%	71%	74%
3. I like to play network games on the mobile devices, such as mobile phone and PDA	76%	64%	45%
4. I like to read news and novels on the mobile devices, such as mobile phone and PDA	86%	74%	60%
5. I like to take photos and videos through mobile phone	85%	83%	76%
6. I want my television to access internet more easily to browse the network videos	86%	84%	79%
7. I like 3D or 4D movies	80%	71%	61%
8. I like entertainment digital products(such as PSP)	70%	59%	42%
9. I like electric reading materials(electric books, electric magazines) more than printing materials(newspapers, books, magazines)	77%	72%	66%

In contrast with the “entertainment function”, the analysis of variance of 5 statements of the “information function” by “age” groups showed statistically significant results (Sig.≤0.05) for 3 ones relevant to the Internet (Table 5).

Tab.5 ANOVA table of information function by age groups(n=1106)

Options in the information function	F	Significance
1. Mobile phone is an indispensable communication tool between I and my family	2.470	.085

2. Internet is an important way to contact with my friends	39.108	.000**
3. Internet is the major external information sources for people in current days	12.289	.000**
4. An easy and free access to the internet should be provided in general places	13.115	.000**
5. Electronic navigational devices (mobile phone navigation, vehicle navigation or professional navigation devices) are very popular	2.361	.095

The data of Table 6 (proportion of the agreed) indicates that the Internet is the major source of information for young people. Young people’s demand for the Internet is higher than that of other age groups.

Tab.6 Percentages of age groups choosing the options in information function (n=1106)

<u>Options in information function</u>	<u>20-30</u>	<u>31-40</u>	<u>41-50</u>
2. Internet is an important way to contact with my friends	94%	85%	76%
3. Internet is the major external information sources for people in current days	90%	84%	79%
4. An easy and free access to the internet should be provided in general places	94%	91%	82%

4. Value of the study and suggestions

Young people have long been regarded as the vanguard both in the use of new high technology and in setting the direction of the development of future products. The Programme Action for Youth of the United Nations has especially emphasized the principal role of young people in the use of new technology at the approach of the new century, stressing the importance of the development of new technology to broaden employment opportunities of young people. The in-depth study into the current situation of Digital Life of young people has both high commercial value and profound social benefits. This study went beyond the usual limits of research into young people’s Digital Life. In contrast with other current studies, most of which equate Digital Life with Internet usage, this study represents an expansion in the scope of the research in this field, and comprehensively illustrates possible influences of digital technology on young people’s life. In addition, this study explores the impact of young people’s attitude towards Digital Life and “functional demand” on their Digital Life choices. This study might be of great benefit to further research into young people’s Digital Life and of great help to estimate the future trends in this field.

In order to investigate the current situation of Digital Life and evaluate the residents’ use of Digital Life, both qualitative and quantitative methods were used in Case Study of Current Digital Life Status of Citizens of Two Beijing Districts. This paper only presents the results of the young people group. In comparison with other studies in mainland China, this study has not only explored the current situation of Digital Life of young people, but has also provided an in-depth description of the attitude of young people towards Digital Life and “functional demands”. The results of this study will be of benefit to in-depth research on the young people’s perception and use of Digital Life, as well as their psychological demands and sense of satisfaction. These results

can also be of benefit to research on other topics, for example, how the overall attitude of the young people towards Digital Life might affect the course of Digital Life in the society. This study is an independent one and the first one to address the topics of attitude towards Digital Life and “functional demands”. Follow-up study is, therefore, needed to assess the reliability and validity of the study.

References

1. Campus Marketing Institute (2012), *Post-90s' Digital Life: Research Report on Post-90s College Students* [M], China Machine Press
2. Enovate (2011), *2011 Report on Digital Life of Chinese Young People: Comprehensive Observation on Chinese Young People's Digital Life Aged Between 18 and 30* [J], DamnDigital
3. Han, Dong Hee (2007), *New Culture for the Senior with Digital Life* [C], Abstract Book of the 8th Asia/Oceania Regional Congress of Gerontology and Geriatrics
4. Huixin Ke and Xiling Wang (2005), *Analysis on Digital Divide and Other Influence Factors in Five Asia-Pacific Countries/Regions* [J], Modern Communication
5. Jin Yingyun (2004), *Embrace Digital, Embrace Life*, CINIC [J]
6. Shao Lei (2012), *Evolution of New Media and Youth Subculture* [J], Research of Modern Young People
7. Tian Yu and TNS (2009), *Report on Digital World and Digital Life* [J], Post & Telecom
8. Yang Jingying, Lv Haiqi and Yang Hongjun (2007), *Measurement of the Informatization Development Index*, China Statistics
9. *Latest Research Report on Way of Digital Life in Asia-Pacific* [J], China Popular Computer Week, 2001
10. Tian Yu and TNS (2009), *Report on Digital World and Digital Life* [J], Post & Telecom
11. Yang Jingying, Lv Haiqi and Yang Hongjun (2007), *Measurement of the Informatization Development Index*, China Statistics
12. Yang Yingjing, Xiong Youda and Peng Shu (2010), *Informatization Development Index Between China and the World, Series Report on International Comparison of Informatization* [J], China Statistics
13. Yang Jingying and Yang Hongjun (2008), *2007 Research Report on Informatization Development Index of China and other Countries* [J], China Information Yearbook