Original research article

PREFERENCES OF INTERNET PLATFORMS AND ITS ASSOCIATEDDEMOGRAPHIC FACTORS IN INTERNET ADDICTION

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Abstract

Introduction

Internet addiction has become a health concern globally. Under internet addiction, there are five different type of addictions. To understand, treat, prevent internet addiction, it is essential to know the preferences given to various internet platforms and its associated demographic factors.

Aims

To find the preference of online platforms and associated demographic factorsamong internet users.

Materials and methods

Internet addiction severity was assessed by internet addiction test questionnaire (IAT-TN). Semi stuctured questionnaire was set up to collect socio demographic details including preference of online platforms by the users.Statistical analysis was done and the preferences given to online platforms and associated factors were evaluated.

Results

In this study, 1367 people participated. Women watched mostly facebook, whatsapp, youtube, videogames were 14.1%, 35.9%, 34.5%, 0.6% respectively. Men watched facebook, whatsapp, youtube, videogames were 33%, 27.8%, 27%, 2.6% respectively.

In the less than 18 years population group, mostly watched preferences were given to facebook, whatsapp, youtube, videogames were 4.8%, 11.9%, 57.1%, 14.3% respectively. In 18 to 40 age group, it was found 27.7%, 23.2%, 34%, 1.5% respectively. Among above 40 age group, it was found 23.5%, 50.6%, 17.8%, 1.3% respectively.

Unmarried population, mostly watched preference for facebook, whatsapp, youtube, videogame were 17.15%, 21.4%, 38.1%, 4% respectively. In married population, it was found 30.7%, 36.5%, 25.2%, 0.6% respectively.

Conclusions

Men preferred Facebook, whatsapp, youtube more, while female preferred Whatsapp, youtube more. Below 18 age people were watching videogames than others. In 18 to 40 age group, Youtube is the most watched one. In above 40 age group, Whatsappis the most watched. School population watched videogames more. Married people use internet for communication than game and entertainment. In this study we find significant difference in preference of internet platforms when considering age, gender, education and marital status.

 $\mathbf{Keywords}$ – internet addiction, online platforms, facebook, what sapp, youtube, video games addiction

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Introduction

Internet has revolutionised the world in areas of information, communication, learning, entertainment, shopping, business enormously. Studies show that pandemic has increased internet usage among people. (1,2). In India, there are 840 million total Internet users (60% of population) by 2022 (3). Another worldwide data reveals that 4.88 billion internet users, 4.44 mobile internet users, 4.55 billion active internet users, 2.7 billion facebook users in 2021. (4) At the same time, like drug addiction, internet addiction has become a health concern among people globally. WHO included internet gaming addiction disorder in the 11th edition of ICD -11 (5). Griffiths stated that an addictive behavior is characterized by the six core components of addiction: salience, mood modification, tolerance, withdrawal symptoms, conflict, and relapse (6,7). These addictive behaviours are present in Internet addiction too. Bio psychosocial model defined that a combination of biological, psychological and social factors contributes to the etiology of internet addictions (7,8) Internet addiction is an umbrella term. Under this, there are five different type of addictions - computer addiction (i.e., computer game addiction, information overload (i.e., web surfing addiction), net compulsions (i.e., online gambling or online shopping addiction), cyber sexual addiction (i.e., online pornography or online sex addiction), and cyber-relationship addiction (i.e., an addiction to online relationships) (9). Various internet activities has addictive potential. Some people are addicted to specific activities in internet (10). Few studiesused a qualitative methodology to investigate why teenagers use social medias (11). Barkers study shows the differences in internet usage between men and women. Women used for entertainment and men for connections (12). Researches in life, behaviours shows the differences between girls and boys in using internet [13,14]. To understand, treat, prevent internet addiction, it is essential to know the preferences given to various internet platforms and its associated demographic variations. So that specific treatment and prevention strategies can be taken. These type of studies are scarce especially in the Asian region. This study aims to find the preference of online platforms and demographic variations associated with it among internet users.

Materials and methods

This study was approved by Institutional Ethical Committee, Government omandurar medical college, Tamil Nadu, India. It was conducted via online mode, from January 2022 to April 2022 through self administered questionnaire. Semi stuctured questionnaire was set up to collect socio demographic details. Along with it, Preference of online platforms by the users were also asked.

Internet addiction severity grading was assessed by internet addiction test questionnaire (IAT-TN). (Table 1). It has 10 questions related with internet addiction, based on DSM 5 and ICD 11 addictive behaviours criteria which includes salience, withdrawal, loss of control, impairment in social, education, job (15,16). It uses 4 point Likert scale, scores ranging from 0-30. Options were given in frequency form (never, occasionally, frequently, always). With total scores, severity grading is assessed (1-10 mild, 11-20 moderate, 21-30 severe). Higher score reflects higher severity.

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Statistical analysis was done by using Statistical Package for the Social Sciences (SPSS) version 20 and results were tabulated. Descriptive statistics were used to report frequencies. Pearson correlation analysis was used to evaluate the relationship among various clinical variables. Statistically significant difference was considered at p-value <0.05. Among the study population, the preferences given to online platforms with respect to age, gender, education, economic status, marital status were evaluated.

Results

Table 1

Internet Addiction Test (TN)

| No. | Item (During past one month) | Nil | Occasionally | Frequently | Always |
|-----|--|-----|--------------|------------|--------|
| 1 | When internet, social media/mobile phone/video game is not available, I feel empty, sad and frustrated. | 0 | 1 | 2 | 3 |
| 2 | While using internet , I lose count of the time I spend on it | 0 | 1 | 2 | 3 |
| 3 | Internet usage is increasing gradually over time. | 0 | 1 | 2 | 3 |
| 4 | I am not able to stop or restrict using my phone. | 0 | 1 | 2 | 3 |
| 5 | While I study or work, I spend more time on phone unnecessarily. | 0 | 1 | 2 | 3 |
| 6 | If someone criticises me or stops me from using phone, I develop anger and frustration towards them. | 0 | 1 | 2 | 3 |
| 7 | Immediately after waking up, I pick up my phone first to surf the internet, social media or play video games. | 0 | 1 | 2 | 3 |
| 8 | My bed time is delayed due to usage of phone. | 0 | 1 | 2 | 3 |

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| 9 | Using phone affects my education / work. | 0 | 1 | 2 | 3 |
|----|---|---|---|---|---|
| 10 | I prefer to spend time on mobile phone rather than with my family members | 0 | 1 | 2 | 3 |

Table 2

Socio demographic variable

| Socio | demographic | N (%) |
|----------------|---------------|--------------|
| variables | | |
| Sex | | |
| Male | | 524 (61.6%) |
| Female | | 843 (38.4%) |
| age | | |
| Below | 18 | 42 (3.1%) |
| 18-40 | | 925 (67.7%) |
| Above 40 | | 400 (29.2%) |
| Education leve | el | |
| School | level | 126 (9.2%) |
| College level | | 1241 (90.8%) |
| Monthly incor | me | |
| Below 20,00 | 0 per month | 364 (26.6%) |
| 20,000 and | above per | 1003 (73.4%) |
| month | | 863 |
| Marital | statusMarried | (63.1%) 504 |
| Unmarried | | (36.9%) |

Table 3

Internet addiction in general population

| Addiction | Percentage | | | | |
|-----------|------------|---------|--|--|--|
| Nil | 48 | (3.5%) | | | |
| Mild | 788 | (57.6%) | | | |
| Moderate | 407 | (29.8%) | | | |
| Severe | 124 | (9.1%) | | | |

Table 4

Preference to online platforms among population in internet addiction

| Online platforms | Preference by study participants | | | | | |
|-------------------|----------------------------------|---------|--|--|--|--|
| | N (%) |) | | | | |
| Facebook, twitter | 352 | (25.8%) | | | | |
| Whatsapp | 421 | (30.9%) | | | | |
| Youtube | 409 | (30%) | | | | |
| Videogames | 25 | (1.8%) | | | | |
| Others | 158 | (11.5%) | | | | |

Table 5

Preference to online platforms and gender in internet addiction

| | | | Mostly wa | tched | | | | | |
|-----|-------|--------------------------|--------------|---------|-----------|--------|-----------|-------------|--------|
| Sex | | Faceboo k, twitter | Whatsap p | youtube | videogame | others | Tota 1 | P- value | |
| 1 | femal | Count | 74 | 189 | 180 | 3 | 78 | 524 | < 0.05 |
| | e | % withi n sex | 14.1% | 35.9% | 34.5% | .6% | 14.9% | 100 % | |
| 2 | male | Count % | 279 | 234 | 228 | 22 | 80 | | |

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| within | 33.0% | 27.8% | 27.0% | 2.6% | 9.5% | 843 | |
|--------|-------|-------|-------|------|------|----------|--|
| sex | | | | | | 100 % | |

Table 6

Preference of online platforms and age in internet addiction

| | | | Mostly wate | ched | | | | | |
|---|----------|--------------------|----------------------|--------------|---------|-----------|------------|-----------------|-------------|
| A | Age | | Facebook, twitter | Whatsap p | youtube | videogame | Other s | Tota 1 | P- valve |
| 1 | 18-40 | Count | 255 | 215 | 14 | 14 | 126 | 925 | < 0.05 |
| 2 | above 40 | %withi n sex | 27.7% | 23.2% | 1.5% | 1.5% | 13.6% | 100 % | |
| | | Count | 94 | 203 | 5 | 5 | 27 | | |
| 3 | below 18 | % within sex | 23.5% | 50.6% | 1.3% | 1.3% | 6.8% | 400 100 % | |
| | | Count | 2 | 5 | 6 | 6 | 5 | | |
| | | % within | 4.8% | 11.9% | 14.3% | 14.3% | 11.9% | 42 | |
| | | sex | | | | | | 100 % | |

Table 7

Preference of online platforms and education level in internet addictio

| | Mostly watched | | | | | | |
|------------------|--------------------------|--------------|---------|---------------|--------|-------|-------------|
| Education status | Faceboo k, twitter | Whatsap p | youtube | Videogam e | others | Total | P- value |

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| 1 | College | Count | 306 | 393 | 363 | 17 | 146 | 1226 | < 0.05 |
|---|---------|-----------------------------|-------------|-------------|-------------|-----------|------------|-------------|--------|
| 2 | school | % withi n sex | 25.0% | 32.1% | 29.6% | 1.4% | 11.9% | 100% | |
| | | Count % within sex | 43 34.7% | 21 16.9% | 41 33.1% | 9 7.2% | 10 8.1% | 124 100% | |

Table 8

Preference of online platforms and monthly income in internet addiction

| M | lonthly inco | ome | Mostly wa | itched | | | | | |
|----|-----------------|-----------------------------|--------------------------|--------------|-----------------|------------|--------------|-------------|-------------|
| (i | (in rupees) | | Faceboo k, twitter | Whatsap p | Vhatsap youtube | | others | Total | P- value |
| 1 | above 20,000 | Count %withi n sex | 235 23.7% | 335 33.7% | 294 29.6% | 16 1.6% | 113 11.4% | 993 100% | <0.05 |
| 2 | upto 20,000 | Count % within sex | 117 32.5% | 83 23.1% | 111 30.8% | 8 2.2% | 41 11.4% | 360 100% | |

Table 9

Preference of online platform and marital status in internet addiction

| Marital status | Mostly wa | tched | | | | | |
|----------------|---------------|----------|---------|-----------|--------|-------|-------------|
| | Faceboo k, | whatsapp | youtube | videogame | others | Total | P- value |
| | twitter | | | | | | |

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| 1 | Married | Count | 265 | 315 | 217 | 5 | 60 | 862 | < 0.05 |
|---|-----------|---|----------------------|-----------------------|-----------------------|-------------------|---------------------|---------------------|--------|
| 2 | Unmarried | % with in sex Count % within sex | 30.7% 86 17.1% | 36.5% 108 21.4% | 25.2% 192 38.1% | .6% 20 4.0% | 7.0% 98 19.4% | 100% 504 100% | |

In this study, 1367 people participated. Among them 61.7% were male, female were 38.3%. Other demographic details regarding age, educational level, monthly income, marital status are shown in table 2. Among the study population, the severity of internet addiction is shown in table 3.

In general, Preference were given to facebook& twitter, whatsapp, youtube, videogames, others were 25.8%, 30.9%, 30%, 1.8%, 11.5% respectively. (Table 4)

Among gender, women watched mostly facebook, whatsapp, youtube, videogames are 14.1%, 35.9%, 34.5%, 0.6% respectively. Men watchedfacebook, whatsapp, youtube, videogames are 33%, 27.8%, 27%, 2.6% respectively. (table 5)

In the less than 18 years population group, mostly watched preferences were given tofacebook& twitter, whatsapp,youtube, videogameswere 4.8%, 11.9%, 57.1%, 14.3% respectively. In 18 to 40 age group, it wasfound 27.7%, 23.2%, 34%, 1.5% respectively. Among above 40 age group, it was found 23.5%, 50.6%, 17.8%, 1.3% respectively (table 6).

Among school level education group, mostly watched preference for facebook& twitter, whatsapp, youtube, videogame were 34.7%, 26.9%, 33.1%, 7.2% respectively. In college level group, it was found25%, 32.1%, 29.6%, 1.4% respectively (table 7).

Among below 20,000 per month income population, mostly watched preference for facebook&twitter, whatsapp, youtube, videogame were 32.5%, 23.1%, 30.8%, 2.2% respectively. In above 20,000 per month income population, it was found 23.7%, 33.7%, 29.6%, 1.6% respectively (table8).

Among unmarried population, mostly watched preference for facebook& twitter, whatsapp, youtube, videogame were 17.15%, 21.4%, 38.1%, 4% respectively. In married population, it wasfound 30.7%, 36.5%, 25.2%, 0.6% respectively (table 9).

Discussion

In overall population, mostly watched platforms are Whatsapp (30.9%) ,youtube (30%),Facebook, twitter (25.8%). Videogames (1.8%) are the least watched. But these trends vary whenanalysing demographic variables.

When we consider gender differences, men preferred Facebook, twitter (33%), whatsapp (27.8%), youtube (27%). Videogames (2.6%) is the least watched. Among female Whatsapp (35.9%), youtube (34.4%) are the mostly watched. Videogames are least watched.

Compared to male, female watched videogames less. They also spent less time in social media like facebook, twitter. It shows that female are using youtube, whatsapp, still avoid public communication platforms in indian settings. Interestingly, barker study also showed that women used internet for entertainment, whereas men use for communication. (17)

When considering age groups,

In below 18 age group, Youtube (57.1%) is the most watched one, followed by whatsapp, videogames. Facebook, twitter (4.8%) are the least watched in below 18 age groups. Videogames are 10 times more preferred in below 18 age group than any other age group people. Below 18 age people use mobile for watching videos and games than others.

In 18 to 40 age group, Youtube (34%) is the most watched one, followed by facebook, twitter, whatsapp. videogames (1.5%) are the least watched. In 18-40 age, people use internet for entertainment and communication equally. Videogames are less common in this group. A study conducted US shows that a majority of 18- to 29 year-olds say they use Instagram (71%) or Snapchat (65%), while roughly half say the same for TikTok. (18)

In above 40 age group, Whatsapp (50.6%) is the most watched , followed by facebook, twitter and youtube. Videogames are the least watched. Above 40 age people use mobile phone more for communication and interaction rather than entertainment. These findings shows the changing preference of internet use in various age group. This resembles the survey conducted in US which shows that 65% of adults, age 18 to 29 say they use Snapchat, while just 2% of those 65 and older report using the app, and a vast majority of adults under the age of 65 say they use YouTube. However, this share drops substantially to 49% among those 65 and older. (18)

When we consider the educational status, school level population watched videogames 5 times more, while college level population watched whatsapp more.

Considering monthly income, lower income population watched facebook, videogames than upper income population.

Regarding to marital status, Youtube are the most preferred one in unmarried group. Video games are watched7 times more in unmarried group. Whatsapp, facebook, twitter are watched more in married group. Married people use communication mode more than game and entertainment.

In this study we find significant difference in preference of internet platforms when considering age, gender, education and marital status. It shows variation of addictive behaviour in different population. The reason behind addictive potential of internet platfroms are to be researched more. Unlike substance addiction, internet addiction can not be advised for abstinence from internet as it is the major part of human life. So prevention, treatment of

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internet addiction and controlled use strategies are planned. Each type of addiction prevalence and its associated factors to be researched more to find out remedy for internet addiction behaviour. More studies in this area will be helpful.

Conclusion

There is significant difference in preferences of internet platforms among demographic variation. It shows variation of internet addictive behaviour in different population. Each type of addiction behaviour and its associated factors to be researched more to find out remedy for internet addiction.

Limitation

This Study sample is small. More larger sample will be needed to explore further details. Day by day more online platforms are penetrating in the population. It has to be included in coming studies. Personalities and psychological comorbidities are not asked in this study. Evaluation of these factors also shed light in these researches.

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