

**A Study of Mobile Phone Involvement among College Students:
Exploring the role of Gender and Personality**

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ABSTRACT

Background: *The mobile phone as a technological device has become a part and parcel of our life. Some researchers consider young people's obsession with mobile phones as a form of addiction while others prefer to use milder terms like involvement. Mobile phone usage is influenced by factors like gender, age and personality traits.*

Aims: *This study aims at investigating gender differences in mobile phone use and involvement among college students. It also aims at exploring the impact of two personality variables namely self esteem and need to belong on mobile phone involvement.*

Methodology: *The study conducted on 250 college students(125 male and 125 female)uses questionnaires to measure mobile phone involvement, (Walsh, et.al, 2008) self-esteem (Rosenberg, 1965) and Need to Belong(Leary et.al 1995).Data is also gathered about 6 parameters of mobile phone use.*

Results: *Findings indicated that mobile phone use is higher among male subjects than female subjects. However there are no significant gender differences in mobile phone involvement. Further need to belong is found to be a significant factor in influencing mobile phone involvement in both males and females but self esteem does not have significant effects.*

Conclusions: *Results lend only partial support to the idea that there are gender differences in mobile phone use. Need to belong is an important predictor of mobile phone involvement.*

Key words: *Gender, Mobile phone involvement, Need to belong, Self esteem.*

Introduction

Human beings have made tremendous technological advances. Each new technology makes human life easier and hence we are very quick to adopt newer technologies. The mobile phone is one such gadget which has become a part and parcel of our life. One of the reasons for the extensive use and adoption of mobile phone technology is the fact that a number of gadgets are embedded in modern mobile phones. Hence mobile phones are used not only to make and receive calls and messages but also to put reminders for important activities play games, use calendar feature, listen to and record music, set up alarm and a ready source of camera for taking pictures in various situations.

Review of Literature

With more and more use of mobile phones by the younger generation, researchers have evaluated the impact of the same on the life of the users. They have also evaluated how the patterns and extent of mobile phone usage is influenced by factors like gender, age and personality traits. Devís et al. (2009) found that boys spend more time on mobile phone use than girls. However others have found no differences in the amount that each gender uses their mobile phones (Peters, O., et al., 2003; Rees

&Noyes, 2007). Some other factors have also been found linked to the extent of mobile phone usage such as marital status and work status, income etc. (Rice & Katz, 2003). However others like Prezza (2004) proposed that gender, socio economic status etc. are not associated with mobile phone usage among youngsters.

One of the approaches to understanding mobile phone behaviour is the use of a personality perspective to improve our understanding of psychological factors underlying mobile phone use. (Bianchi & Phillips, 2005; Butt & Phillips, 2008). This approach looks at the role of dispositional factors or internal factors which drive behaviour. Research studies which have used the five factor model of personality (Costa & McCrae, 1992) to explore the psychological profile of mobile phone users found that the most consistent personality predictors of mobile phone behaviour are agreeableness and extraversion (Bianchi & Phillips, 2005; Butt & Phillips, 2008; Ehrenberg, et al. 2008). According to Bianchi & Phillips (2005), extraverts spend more time using their mobile phone overall, throughout the week, and for addictive use. In particular, young extraverts are likely to be frequent mobile phone users whereas addicted/dependent users tended to be young, extraverted, and have lower self-esteem. Ehrenberg et al. (2008) found that extraverts, as well as individuals high on neuroticism, reported frequent use of text messaging. Data suggest that majority of the mobile addicts are teenagers, whose shyness and low self-esteem make them succumb to aggressive publicity marketing as a means to get in touch with people without having to meet them (Takao et al., 2009).

Social motivations underlie much social behaviour and guide the way people seek to interact with others. People actively decide why, when and how to use objects like telecommunication devices to meet a specific need (Higgins, Strauman & Klien 1986; Pittman, 1998). Two among the five commonly agreed social motives are self esteem (Leary, Tambor, Terdel, & Downs, 1995) and belonging (Baumister & Leary, 1995). Self esteem is related to an individual's perception of their worth as a person. Youth in particular base their self esteem on their relationships with others. (Rosenberg, 1965). Research indicates that self esteem influences people's perceptions of how they have been treated by others and affects a person's interpretation of control understanding and trust (Leary, et al. 1995). The need to belong is the need to form strong stable relationships and to engage in activities which promote the formation and maintenance of social bonds (Baumister & Leary, 1995). People with a strong need to belong engage in behaviours which develop personal contact and cultivate social relationships in order to feel connected to other people. People with a high level of belongingness are better adjusted and those who lack a sense of belonging have poor mental wellbeing and low self esteem (Baumeister, 1991). Self esteem is important for overall psychological health, hence the relationship between self esteem and need to belong is a key consideration when examining much social behaviour. (Baumeister, Tice, & Hutton, 1989).

People use mobile phones as a status symbol hence its ownership may enhance an individual's self esteem (Ozcan & Kocak, 2003). Bianchi and Phillips (2005) reported that problematic mobile phone use behaviour is related to low self-esteem, others (Ha et al. 2008) found that low self-esteem predicted excessive mobile phone use. However other authors report no relationship between self esteem and the amount of mobile phone use (Butt & Phillips, 2008; Ehrenberg, et al. 2008). Positive self esteem is related to the formation of close bonds with others. (Liable et al. 2004). A feeling of belonging is related to high levels of self esteem (Gaillot & Baumeister, 2007). Since mobile phones promote connection to others (O'peters & ben Allouch, 2005; Wei & Lo, 2006), we can expect that both need to belong and self esteem relate to young people's mobile phone behaviour.

This study examines the gender differences in mobile phone use frequency and involvement .It also studies the role of two personality factors namely self esteem and need to belong on mobile phone involvement.

Method

Hypothesis:

It was hypothesized that

- Mobile phone use would be higher on all the six parameters among male subjects than female subjects.
- Mobile phone involvement would be higher among male subjects than among female subjects.
- Mobile phone involvement would be higher among those with low self esteem.
- Mobile phone involvement would be higher among those with a high need to belong.

Sample:

The sample consisted of 250 college students (125male and 125female) pursuing various undergraduate programmes in colleges located in Mumbai. The age of the subjects ranged from 18years to 21years.

Tools and procedure:

Subjects were asked to provide their personal demographic details. Mobile phone use was measured using 6 open-ended questions covering six parameters namely

1. Average number of calls made
2. Average number of calls received
3. Average number of text messages sent
4. Average number of text messages received
5. Average amount of time spent
6. Average amount of money spent.

Mobile phone involvement was measured using the Mobile Phone Involvement Questionnaire (Walsh, et.al, 2008) having 8 items scored from 1 strongly disagree to 7 strongly agree. Self-Esteem was measured using a scale developed by Rosenberg (1965).The scale has 10 items and is scored from 1strongly disagree to 4 strongly agree. Need to belong was measured using a scale developed by Learyet.al (1995) having 10 items and scored from 1strongly disagree to 5 strongly agree.

The researcher approached the subjects during lectures and explained the purpose of the study. Copies of the questionnaire were distributed and clear instructions were given. The subjects then filled up the questionnaire with the experimenter clarifying meanings of terms as and when required .On an average the questionnaires took about 20 minutes to be completed which was followed by short debriefing session.

Data Analysis:

Total and mean scores were calculated for all the six parameters of mobile phone use. Total and mean scores were also calculated mobile phone involvement, self-esteem and need to belong. T- tests were computed to find out gender differences on various parameters of mobile phone use namely average number of calls made and received, number of text messages sent and received as well as amount of time and money. T- tests were also computed to measure gender differences in mobile phone involvement, self esteem and need to belong. Regression analysis was performed to study whether self esteem and need to belong significantly influence mobile phone involvement in both male and female subjects.

Results and Discussion

The findings showed significant gender differences in mobile phone use with reference two parameters namely number of calls made($t=4.029$, $p<0.000$) and received($t=3.400$, $p<0.001$) . As hypothesized the average no of calls made by male subjects ($M=11.50$) was higher than that of female subjects ($M=5.98$). Similarly the average no of calls received by male subjects ($M=18.54$) was higher than that of female subjects ($M=8.89$). On the other parameters namely average number of messages sent and received and amount of money spent also the results were in the same direction with male subjects scoring higher but these differences were not significant. However female subjects seem to be spending more time on their mobile phones than male subjects but these differences are not statistically significant. These findings are similar to those of Devís et al. (2009).

There were no significant gender differences with reference to mobile phone involvement however female subjects ($M=32.65$) are higher on mobile phone involvement than male subjects($M=31.54$). Thus surprisingly while mobile phone use is higher among male subjects than among female subjects involvement scores are in the opposite direction. Thus there was no support for the hypothesis that mobile phone involvement is higher among male subjects. These results are rather peculiar because mobile phone use is higher among male subjects than female subjects but female subjects are more involved with their mobile phones than male subjects. These results are likely to be influenced by personality factors like self-esteem and need to belong.

Results indicated that self –esteem scores are higher among female subjects ($M=19.60$) than among male subjects ($M=18.48$). Need to belong is higher among female subjects ($M=34.01$) than among male subjects ($M=32.46$). However these results are not significant. This study aimed at finding out the relationship between self-esteem and mobile phone involvement. Results of sequential regression (Table 1) indicated that need to belong is a significant predictor of mobile phone involvement.

Table 1: Summary Table of Regression of Need to Belong and Mobile phone Involvement

Model	Change Statistics								
	R	RSquare	Adjusted RSquare	Std.Error of the estimate	RSquare change	F Change	df1	df2	Sig.FChange
1.	.248(a)	.061	.058	8.813	.061	16.210	1	248	.000

a. Predictors(Constant),Need to belong score

Results indicated that a positive correlation existed between need to belong and mobile phone involvement, however the correlation was not very strong. These results indicate that for young students the mobile phone is more than a communication device. It is quite likely that they feel left out without their mobile phones. As discussed earlier people may also associate a certain status with mobile phone use and hence those who do not have mobile phones or are not actively using them as a means of communication may feel left out. The advantage that mobile phones afford young people is privacy in their communication. Using mobile phones they are able to communicate to friends about their plans, college students use phones to schedule meetings with close friends and to plan leisure activities as well as to communicate about lecture schedules and submission deadlines. This means a young person who does not use it may remain cut off from others in the group. This would mean that mobile phone users especially young college going students satisfy their need to belong by keeping in touch with their friends using their mobile phones.

Conclusion

This study throws light on the role of gender and personality variables on mobile phone use among college students. Results indicate that male and female subjects differ from each other significantly on two dimensions namely number of calls made and received. Males use mobile phones to make and receive calls more than females. However mobile phone involvement is higher among females than among males. This may be because female subjects especially the young undergraduate students who comprise the sample of this study carry a mobile phone for purposes other than merely making and receiving calls. Research indicates that having a mobile phone gives women a sense of security. They may not use the mobile phone frequently hence use is lower but they keep it readily in consciousness and easily available in case of emergency hence involvement is high (Caroll et.al.2002). The mobile phone involvement scores of both males and females are in the mid range and not indicative of any pathological addiction.

This study looked at the role of two personality factors namely self-esteem and need to belong on mobile phone involvement. Results indicated that while need to belong can be a predictor of mobile phone involvement, self-esteem is not significantly related to mobile phone involvement. Its relationship to personality variables points to the fact that the mobile phone satisfies many social motivations like fulfilling an individual's need to belong. Thus the mobile phone is much more than a mere communication device. A positive finding is that though mobile phones have moved beyond being mere communication devices they have not become addictions. It is just that young people are involved with their mobile phones. This means that authorities have no need to be concerned about mobile phone addiction at least among a sample of this age group. One of the limitations of this study is that it covers only two personality factors; further research must include more variables to gain a better understanding of the role of personality on mobile phone use.

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