Use of Mobile Phones and the Social Lives of Urban Adolescents: A Review of Literature

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Abstract

Purpose: The review investigates some aspects of the emerging literature on the culture of mobile phones in the emerging societies. Pertinent issues include the psychosocial aspects of communication technology; patterns of interaction with peers, parents and anonymous others; status hierarchy in terms of ownership and the various functions that mobile phone has in shaping the identity of adolescents. The study also highlights how school, home and public places (such as public transport) serve as settings for the mobile interactions.

Methodology: The study uses the previous literature as a base to explore the use of mobile technology.

Findings: The findings suggest that the urban adolescents use mobile phones for a wide range of activities in their social lives. Social contacts are replaced by virtual-world contacts because of mobile phone usage.

Social Implications: The study is expected to generate valuable implications for parents, educators and developers of communication technologies. Every change in public policies and each new innovation in technology must take into account the impact it has on the social lives of adolescents.

Originality/Value: The study intends to enlighten future research in mobile phone research and will definitely take in to account the adolescent lot while researching various facets of mobile technology.

Keywords: *Adolescent Communication; Mobile-Phone Culture; Social Contacts; Mobile Communication Systems*

Paper Type: *Review*

Introduction

It is not hard to gauge the popularity of the mobile-phone phenomenon in Malaysia. In 2006 Malaysia had the second highest mobile phone penetration rate (72.3%) among ASEAN (Association of Southeast Asian Nations) countries **(Malasian Communication and Multimedia Commission, MCMC, 2006)**. The first commercial mobile phone service in Malaysia was established in 1988, by Celcom, which is one of the three main players in the mobile market. The other two service providers are Maxis and Digi, established in 1993 and 1995 respectively. These three telecoms are currently engaged in an intense competition in the market, each coming up with attractive packages for subscribers, especially in prepaid services, which constitute about 84% of the subscribers **(Malasian Communication and Multimedia Commission, MCMC, 2007)**.

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After the introduction of the prepaid services and the subsidization of handsets, mobile phone communication in Malaysia picked up at a fast pace. Pre-teens and teens together constituted about 20.5% of the total user base in Malaysia in 2006, which is a sharp rise from 13.1% in 2005.There is a significant increase in the percentage of subscribers sending more than 5 SMS's per day over the period 2004 (31.7%) to 2006 (46.1%) **(Malasian Communication and Multimedia Commission, MCMC, 2007)**. In all ethnographic as well as quantitative studies done on the use of mobile phones so far, adolescents have been the most avid user group in all countries. Given their unique situation *vis-à-vis* the older age-groups and any new technology in general, their response to mobile phones does not come as a surprise. For instance, it is not an uncommon sight in Malaysia to find teenagers 'thumbing' their handheld devices in urban public spaces, oblivious to the rest of the living world around them, experiencing a new way to express identity; rooted in and giving rise to a new sub-culture with its own norms, values and patterns of behaviour.

This sub-culture is, in many ways, comparable to that of other societies such as those in Western Europe, since it can be argued that there is a limited number of responses that technology can generate in any given society, and that specific cultural variation alter slightly the patterns of usage. However, cross-cultural ethnographies of the mobile phone have revealed some significant differences in such aspects as usage, adoption and even penetration.

Those international differences are probably reflected in the fact that a limited number of countries have emerged which have so far been well-researched by ICT ethnographers. These countries include Japan, United States, some Western European countries like Norway, Finland, Germany, Philippines, and United Kingdom. As such, many countries have been left out of academic studies and we are yet to paint a complete sociological picture of mobile-phone communication.

It is, therefore, the aim of the review to focus on the Malaysian context, with special reference to adolescents, which is by far the most hyped group of users in all countries for diverse reasons. This review would serve as precursor to research aiming to find out, for instance, whether and to what extent theories of the mobile phone would explain and predict usage and adoption patterns of mobile technology in Malaysia.

As a Sub-culture
According to various studies, adolescent mobile phone usage is characterised by the heavy use of SMS; 'bomb calls'; games; heavy personalisation; high levels of ownership; gendering; friend oriented communication; locality (as opposed to expansion); download of

ringtones, screensavers and email alerts; picture messaging; moblogging; parental supervision or tethering; strict school policies; addiction therapy; price sensitivity; high use; and problem use **(Rautiainen, 2002; Ling, 2002; Mante, 2002; Selian, 2004; Vincent, 2004; Pertierra, 2005; MACRO, 2004)**.

Many researchers have used the terms *'culture'* and/or *'sub-culture'* to refer to the use of mobile phones by adolescents **(Rautiainen, 2002; Ling, 2002; Lorente, 2002; Ito, 2005)**. They have identified ways in which adolescents construct their own sub-culture by differentiating themselves from adults **(Castells, Fernandez-Ardevol, Qiu, & Sey, 2004)**. Some studies also reveal that the mobile phone device itself is becoming a cultural artifact that shapes cultural flows **(Satchell, 2004).** Focussing on new trends in socialisation as a result of the mobile phone, **Lorente (2002b)** argues that young people start out with playing, followed by sending written messages, and eventually end up using call functions.

As a sub-culture, then, it manifests itself by being integrated in the norms and rites of the larger culture. Examples from available studies of such integration include the use of the mobile phone as the marker of a kind of *'passage rite'* **(Lorente, 2002b)**; emergence of social norms governing use of mobile phones in public places **(Humphreys, 2003; Selian, 2004)**; exchange of 'religious-coded' texts **(Ellwood, 2006)**; discussion and comparison of services and devices among adolescents **(Rautiainen, 2001)**; and increasing individualistic tendencies among adolescents **(Pertierra, 2005)**.

In all studies of communication technology and adolescents, it is important to make a distinction between basic and peripheral functions of that particular technology. The impact of the mobile phone on communication within a community has been explored by **Lorente (2002 a)** as reflected in the emergence of a new type of natural community where the mobile phone is absolutely necessary to implement the compulsion of the primary relations. **Goggins (2006)** argues that cultural differences in mobile phone usage have more to do with preferences in graphics and vocabulary than with the core interaction. However, **Pertierra (2005)** observes that the mobile phone interacts with local socio-cultural conditions, giving rise to indigenised applications of global technology. Moreover, the argument is that the organisational potential of mobile phones is not significant in communities whose members are still in regular consociation. This contradicts what **Mante (2002)**, **Lorente (2002 a)** and **Vincent (2004)** conclude, i.e. use of mobile phone works to strengthen the existing networks rather than expand contacts, generate a kind of return to nomadic communication; thus implying that the mobile phone would be very popular among communities who are still in

regular consociation and would in fact strengthen and abet such consociation.

➢ **Texting**

All available literature reports heavy use of SMS by adolescents **(Sze & Hock, 2004; Bianchi and Phillips, 2005; MACRO, 2004; Nokia, 2002; Ling, 2004; Thurlow, 2003; Haig, 2002; Haste, 2005)**. **Thurlow (2003)** states that adolescents are both the driving force behind, and slaves of, a growing text messaging culture. However, study carried out by **APS (2004)** reveal that a significant number of adolescents reported not sending any SMS most of days. Moreover, there are studies that show the usage of SMS for communication declines among the 'older' adolescents. **Lorente (2002a)**, for instance, sums up this trend by observing that adolescents are initiated by playing, then writing and end up talking. These are the three stages of the reality of mobile communication.

According to previous studies boys and girls respond differently to SMS, the latter use it more than the former **(Lorente, 2002b; Rautiainen, 2002; APS, 2004; MACRO, 2004; Haste, 2005; Grinter & Eldridge, 2001; Rautiainen & Kaseniemi's, 2000)**. Only one study contradicts these findings **(Sze & Hock, 2004)**.

Texting is the preferred mode of contact for nearly all social and communication activities, socialisation and self-expression of the adolescents **(Haste, 2005; Grinter & Palen, 2002; Grinter & Elridge, 2001)**. Adolescents are also the quickest to adopt text messaging **(Grinter & Elridge, 2001)**.

Many studies try to identify the particular gratifications granted by text messaging to the adolescent user group, and not to any other group. Some of these gratifications include being able to avoid 'unnecessary' conversations; to present a different self-image; not to disturb the rules of good behaviour (e.g., answering a call in public places); speed; easier use; certainty of the arrival of a message (as opposed to a call that may not be answered) and cost effectiveness **(Hoflich, 2002; Mante, 2002; Reid & Reid, 2004; Fortunati, 2002; Grinter & Elridge, 2001; Oksman, 2006; Lobet-Maris, 2002; Haddon, 2002)**.

Some studies try to identify the hierarchy of preferred counterparts for SMS communication. According to **Hoflich (2002)**, the hierarchy goes somewhat like this: boyfriend/girlfriend> best friends> normal friends> acquaintances> parents> relatives. **Fortunati (2002)** explains why SMS is not popular for adolescents' communication with their parents; saying that close family communication is linked to primary socialisation, and is therefore of such a verbal form that it becomes practically inconceivable to change from voice to the written mode. However, **Mante (2002)** suggests that sometimes adolescents would prefer SMS contact with

their parents in order to avoid an 'unnecessary' conversation with them. **Ling and Yttri (1999)** report that relationships supported by SMS have their origins in face-to face meetings.

➢ **Addiction**

A few studies have interestingly compared the use of mobile phones among teenagers to smoking; the hypothesis being that adolescents' quest for an individual identity and for peer bonding, functions which used to be fulfilled by habits such as smoking, are now taken over and supplied by the use of mobile phones **(Selian, 2004)**. Addiction and addiction therapy, *a la* smoking, are the characteristics of adolescent mobile phone usage **(Selian, 2004; MACRO, 2004)**. A different interpretation of the analogy between mobile-phone use and smoking is offered by **Humphreys (2003),** who compares the private talk that mobile telephony facilitates in public places to the smoke *'polluting'* the public air.

➢ **Evolution**

Available literature points to the fact that the use of the mobile phone among young (adolescent and children) users undergoes a kind of 'evolution' as the earliest use of the mobile phone is more recreational, which later moves to coordination via text messaging, and finally to making instrumental or expressive voice calls **(Lorente, 2002b; Rautiainen, 2001; Vincent, 2004; APS, 2004)**. The evolution also takes place when communication occurs among adolescents in the younger age group who contact their parents via voice calls **(APS, 2004).**

➢ **Peripheral Features**

Apart from using the mobile phone as a tool for communication, studies report the widespread use of its other features by adolescents, especially mobile entertainment, playing games, ringtone and wallpaper downloads, sending pictures, using the device as a camera, radio, mobile television, a locational device, an alarm clock, an address book, and other aspects of personalisation and entertainment **(Lorente, 2002a; Selian, 2004; Koskinen, 2005; Vincent, 2004; MACRO, 2004; Wong, 2005)**. It has been suggested that sometimes adolescents use the peripheral features so more than the core features that they forget that it was originally a communication tool **(Lobet-Maris, 2002)**. A kind of evolutionary trend has been reported by mobile-phone ethnographers, of how such peripheral features are especially popular among younger adolescents and children, as they later get replaced by the core features **(Lorente, 2002b)**.

The factors identified for the popularity of the peripheral features among adolescents include avoiding boredom, staying updated, maintaining background entertainment while doing other things, and, creating a space of one's own; emancipation from local settings; introduction of

media adoption and socialisation of responding to a communication partner in a given media environment; engagement in 'time-killing activities'; and relaxation **(Hoflich, 2002; Humphreys, 2003; Koskinen, 2005; Leung & Wei, 2000; Tamminen, Toiskallio, Oulasvirta, & Kankainen, 2004)**.

➢ **Gender Differences**

Adolescents consider the mobile phone as important in their lives: girls more than boys **(Oksman, 2006)**. According to previous studies, boys and girls respond differently to SMS, the latter using it more than the former **(Lorente, 2002b; Rautiainen, 2002; APS, 2004; MACRO, 2004; Haste, 2005; Grinter & Eldridge, 2001; Rautiainen & Kaseniemi's, 2000)**. Only one study contradicts these findings **(Sze & Hock, 2004)**.

Researches explain how the mobile phone levels the gender differences between boys and girls precisely by giving rise to *'gendered'* sub-cultures; so that while girls use it primarily as a tool for communication and maintenance of peer-groups and contacts, and social aspects (such as design, ringtone, and colour), boys use it more for its own sake, exploring its features, and as a toy; this difference in use balancing out the amount of use among both groups **(Lobet-Maris, 2002; Rautiainen, 2001; Skog, 2002)**.

Gratifications

Studies have tried to delineate some of the gratifications which mobile phones provide to their adolescent users. Most of the gratifications identified can be clustered around the themes of contribution to identity-formation; maintenance of peer-group networks; and emancipation from local settings.

Aspects of sociability include formation and maintenance of peer-group networks; maintenance of romantic relationships; escape from parental surveillance; co-ordination of group activities; organization and management of social life; as a primary contact medium; sense of belongingness; membership in a group; bonding device for friends and family; personal security; prestige; constant availability; and keeping in touch with geographically-distant relations **(Haddon, 2002; Lorente, 2002 a; Mante, 2002; Lobet-Maris, 2002; Ellwood, 2006; Selian, 2004; Vincent, 2004; Ito, 2004; Pertierra, 2005; APS, 2004; MACRO, 2004; Hoflich, 2002; Ito & Okabe, 2005b; Haste, 2005; Grinter & Elridge, 2001; Ling, 2004; Stuedahl, 1999; Satchell, 2003; McGuigan, 2005; Oksman, 2006; Watt, 2003; Wei & Kolko, 2005)**.

Studies which have set down various aspects of identity reflected as gratifications of the mobile phone specifically for adolescents include influencing fashion; giving of phones by parents to children as a mark of 'maturity'; privacy; emotional, personal and psychological attachment to

the device; authoring a self-image; independence and autonomy from parents; personalisation of the device as a statement of one's identity; replacement of habits such as smoking, and so on **(Selian, 2004; Haddon, 2002; Lobet-Maris, 2002; Vincent, 2004; Wong, 2005; Ling, 2004; Oksman, 2006; Watt, 2003)**.

Many studies of the mobile phones dwell on the aspect of their gratifications that helps users get 'emancipated' from the immediate local settings while connecting them to translocal contacts, and at the same time reducing their contact with the immediate social and physical world. **Geser (2004)** calls them *'vicarious remote interactions'*. This is especially applicable to adolescents. In the setting of the home, they want to be 'with' their friends; in public places they want to present a self-image of being accompanied; and in the setting of the classroom, they want to be able to escape the 'boredom' of class lessons. **Humphreys (2003)** explains that the exact mechanism by which this 'emancipation' takes place is by the fact that although one is physically present in a given setting, one is less open to certain social contacts or interactions. **Fortunati (2002)**, and **Ito and Okabe (2005b)** give examples of such 'emancipatory' use in homes and public places.

Researches also indicate that there are certain miscellaneous aspects of gratification, such as entertainment; staying updated; using for dictionary; productive use of 'social voids' and waiting times; and the mobile phone as a levelling object **(Mante, 2002; Lobet-Maris, 2002; Koskinen, 2005; Pertierra, 2005; Ito & Okabe, 2005b)**.

Adolescent Identity

Most studies that try to explain the exceptional popularity of mobile phones among youth and adolescents link it back to their need for an individual identity and the maintenance of friendship networks, emancipating them from family ties. Moreover, as **Geser (2004)** points out, without possessing fixed addresses and stationary resources, mobile-phone connection is the only thing that anchors them to the society. **Hoflich (2002)** suggests that it is because young people are the social group that is able to 'read' new media most sophisticatedly. And **Ling (2002)** states that the use of the mobile phone is what helps define adolescents *vis-à-vis* older generations. He says that to simply focus on the functional aspects of the device is to generally miss the point. Its real impact is in terms of its ability to define adolescents' identity.

The 'emancipation' of adolescents from their parents as a contributing factor to the formation of their identity has been discussed at length by numerous researchers. They explain the mechanisms by which adolescents bar their parents' surveillance: by blocking information and thereby asserting their individual identity **(Lorente, 2002 a; Fortunati,**

2002; Ling, 2002; Selian, 2004; Brown, Green, and Harper, 2002; Haddon, 2000; Ito, 2005). Hoflich (2002) states that the obtrusiveness of mobile phones is sometimes used in a provocative manner by adolescents in order to challenge the social world of adults and to show resistance to it, thereby strengthening a sub-culture as well as constructing an identity.

In societies with high penetration rates, usage of the mobile phone begins at a particular age, which has come to be marked as a kind of *'passage rite'* **(Vincent, 2004). Lorente (2002)** compares it to the *wrist-watch* of earlier times, which would be gifted to a child at a particular age, and which would thereby signify an increase in the autonomy of the child.

Besides the emancipation from adults and maintenance of friendship networks, mobile phones contribute to identity assertion by being highly personal devices, with vast scope for further personalization. A number of studies focus on how this personalization goes particularly well with the adolescent psyche, giving them an opportunity to express themselves as unique individuals **(Ling, 2002; Lorente, 2002; Lobet-Maris, 2002; Ito, 2005; Ito, 2004; Satchell, 2004; Haste, 2005)**. **Pertierra (2005)** and **MACRO (2004)** report the sentiment that the mobile phone as a personal device is a style statement.

Maintenance of Social Relationships

The mobile information society can be perceived as a society where mobile technology has assumed a central role in social relations, information seeking, learning and, consequently, in people's attachment to social relationships and society at large **(Oksman, 2006)**. The mobile has become an instrument that teens use to define their personal space in relation to friends and parents **(Oksman, 2006)**. Japanese researchers have argued that mobile phones have made youths' relationships selective rather than superficial **(Matsuda, 2000)**.

➢ **Parents**

Literature dealing with how mobile phones influence the pattern of interaction between adolescents and parents is rife with allusions to parents using it as a *'digital leash'* **(Lorente, 2002 b)** to increase control over their kids on one hand, and teenage children viewing it as a means of independence from their parents, on the other. The mobile phone affects two areas of interaction when considering the relationship of teens to their parents: on one hand it allows for better coordination within the family, and on the other, it brings up issues surrounding the emancipation of the teens **(Ling, 2000; Geser, 2004; Lorente, 2002b; Lorente, 2002a; Lobet-Maris, 2002; Selian, 2004; Vincent, 2004; APS, 2004)**. Most studies, however, focus only on the surveillance aspect of

mobile phone communication between parents and adolescents **(Rautiainen, 2002; Ling, 2002; Mante, 2002; Haddon, 2002; Ito, 2005; Klamer, et al, 2000; Green, 2002; Ling & Yttri, 2002; Skog, 2002)**.

➢ **Peer Groups**

In contrast with how mobile phones influence adolescents' interaction with their parents, studies dealing with the role of the mobile phone in maintenance of peer-group networks are much more unanimous. The mobile phone is inevitably a blessing to adolescents, helping them augment already-existing networks, and, in some cases, slightly expand them as well. **Lorente (2002)** discusses how the structure of the new nuclear family gives rise to *'virtual brotherhood/sisterhood'* among children, as most of them have no real sibling contact. At the same time, **Lorente (2002)** maintains that the family and kinship are declining institutions for the young. However, his emphasis on the mobile phone as a keeper of primary group ties does help explain its use in peer-group networks. Other studies also dwell on the idea of a *'virtual fraternity'* providing the lonely adolescent the gratifications of sibling contact **(Fortunati, 2002; Lobet-Maris, 2002)**. The acquisition and adoption of mobile phone among adolescents have been linked to peer pressure **(Rautiainen, 2002; Wong, 2005; APS, 2004; MACRO, 2004)**. Communication with peers is an important factor in the adolescents' daily life. Hence, any device that facilitates it is welcome among them. Studies report a sizeable percentage of adolescents using the mobile phone to be in touch with their friends **(Mante, 2002; Haddon, 2002; Ellwood, 2006; Rautiainen, 2001; Koskinen, 2005; APS, 2004). Selian (2004)** and **Bianchi and Phillips (2005)** report on increasing bullying through the mobile phone, another hallmark of peer-group relations among adolescents. According to **Pertierra (2005)**, expansion of friendship networks through the mobile phone is common in the Philippines. This, however, is not corroborated by studies elsewhere. Nevertheless, adolescents may, and do, cultivate friendships with individuals with whom they would otherwise not have been allowed to do so. Many studies have explored the realm of how text messages via the mobile phone contribute to maintenance of relationships, particularly peer-group relations. One way in which this is achieved is the phenomenon of what has been termed as *'gift messaging'* **(Taylor & Harper, 2003),** or the exchange of feel-good, expressive messages as compared to strictly instrumental ones. These messages function as gifts, which are expected to be circulated as well as reciprocated **(Ellwood, 2006)**. Ironically, **Bianchi and Phillips (2005)** and some other researchers provide evidence that text messages are also being used as a tool by children to bully other children, an exact opposite to *'gift messages'*. **Ling and Yttri (2002)** have formulated the term *"hyper-coordination"* to

explain the expressive and socially active uses of mobile phones by Norwegian teens.

➤ **Anonymous Others**

Regarding the question of whether mobile phones increase the tendency of adolescents to open up to new acquaintances (i.e., individuals other than parents and pre-existing peers) or the tendency towards closure, literature has so far provided diverse answers. Mobile phones are very often used to strengthen already-existing intimate relationships, not to enlarge social interaction to wider circles **(Geser, 2004; Ito & Okabe, 2005b; APS, 2004)**. In fact, contact with anonymous others in dense urban spaces is significantly reduced through the use of mobile phones: something that **Matsuda (2000)** labels *'selective sociality'* and **Ito (2005)** calls the *'replacement'* of social contact. According to **Koskinen (2005),** an important aspect of the closure tendency towards other adults is that it turns the adolescents' attention away from civil concerns to private concerns alone, concluding that mobile phone technology is going to be an individualizing technology. Some studies, however, report that adolescents do use the mobile phone to extend their social networks beyond known peer groups and the family **(Pertierra, 2005). Ellwood's (2006)** studies mobile phone usage in the Philippines and finds that flirting over the mobile phone with strangers is found to be common, thereby indicating openness to the category of anonymous others.

Public Places

Of the three settings (home, school and public places), public space is probably the one setting that most pointedly brings out the characteristics of adolescent mobile-phone sub-culture. Studies have extensively investigated the use of mobile phones in public spaces, and mostly observe the evolution of new norms, patterns of interaction with anonymous others and companions, as well as gratifications associated with mobile phone use in public spaces. **Selian (2004)** brings out how important the study of public mobile phone usage is in understanding the overall usage patterns and mobile-phone *'culture'* in any given society. For example, he tries to explain the low levels of popularity of the mobile phone among American adolescents as compared to their European counterparts by saying that American teens drive to and from school and work, reducing the amount of time they spend on hands-free commuting; while as European teens spend greater portions of their time in public spaces and on mass transit. **Humphreys (2003)** suggests that one of the gratifications of mobile phone use in public spaces is especially reserved for *'singles'*, or individuals who are out alone. Using the mobile phone gives them the confidence that they are not out alone, but are constantly in touch with other translocal contacts. Public transportation

and meeting places can also become settings for intimate and private contact with physically absent others **(Ito, 2005).**

Another possible gratification is that it creates a channel for isolation from the immediate environment. **Ito and Okabe (2005 b)** mention that contact with anonymous others in dense urban spaces like Tokyo has changed with the widespread adoption of the *keitai* Internet. Observing the micro-interactions of mobile phone users in public spaces, **Geser (2004)** visualises that whenever a phone call occurs, it is the casual relationship with bystanders which is momentarily broken in favour of the intruding distant kin or friend. And after that call is over, the user undergoes *'uneasy moments of anomie'* during which he/she gets back to the original interlocutor. **Humphreys (2003)** observes that nonverbal cues such as turning ones' back to other people or staring at the floor while on a cellphone can indicate a standoffishness and desire for privacy. A significant percentage from the respondents of the **MACRO (2004)** survey reported that their use of the mobile phone in public places was accompanied by habits such as strolling, which **Humphreys (2003)** would describe as a method of *'privatising'* the public space. Researchers have identified certain public places to be popular for mobile phone usage. These include railway stations, outside buildings, stores, public transport, and campuses **(Humphreys, 2003; Selian, 2004; MACRO, 2004; Geser, 2004). Plant (2002)** observes the rituals of mobile phone use in public places – the being *"on the mobile"* in public is itself a ritual act. **Plant (2002)** also distinguishes between what she names as *"innie"* and *"outie"* behaviour by mobile users. Innies use their phones as unobtrusively as possible whereas outies integrate phone conversation into the situation of co-presence. These different kinds of response and habitual behaviour are associated with complex rules of etiquette that have developed around mobile phone use **(McGuigan, 2005).** There have been both formal attempts to regulate use creating mobile-free zones in a variety of public spaces (on some parts of trains, in some restaurants, in theatres) and informal strategies of social control have been exercised against users **(Ling, 1998).**

Prestige
The question of whether the mobile phone is seen as a symbol of status within the adolescent sub-culture has been dealt in a number of researches. The unexpected rate at which mobile phone technology has been developed and adopted has made it a very popular phenomenon, so that it is no longer associated with prestige, as was the case only a few years ago **(Lorente, 2002 a; MACRO, 2004; Hoflich, 2002).** On the other hand, some studies indicate that mobile phones might in some ways still be a source of social prestige. For instance, the mobile phone may act as

the barometer of an adolescent's social life, thereby contributing to aspects of prestige **(Lobet-Maris, 2002).** Similarly, phenomena such as *'cell-yell'* and the symbolic complexity of the medium's usage give rise to further parameters for prestige and ranking among adolescents **(Humphreys, 2003; Fortunati, 2002; Rautiainen, 2002).** The possibility of stratification based on mobile phones is still not ruled out, as the subculture introduces a whole new range of parameters to judge people by. These may include the type, make and model of one's device, as well as factual usage patterns **(Geser, 2004; Pertierra, 2005). APS (2004**) reports that a significant percentage of adolescents who did not have a mobile phone reported feeling left out of social interactions and sometimes felt pressured by friends to get a mobile phone.

Conclusion

The review implies correlations between mobile phone ownership and important social and psychological variables such as identity. The re-placement of social contact from real-world contacts to increasingly virtual one is inevitable among such a social group as adolescents. Empirical studies following themes identified in this review are expected to generate valuable implications for parents, educators and developers of communication technologies. Every change in public policies and each new innovation in technology must take into account the impact it has on the social lives of adolescents.

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