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RUNNING HEAD: Mobile phone use

The phone connection: A qualitative exploration of how belongingness and

social identification relate to mobile phone use amongst Australian youth.

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Abstract

Mobile phone use is a prevalent behaviour amongst youth; however, there is little research to determine psychological influences on mobile phone use. This paper reports the results of a qualitative exploration into social psychological factors relating to young people's mobile phone use. Focus groups were conducted with 32 participants, aged between 16 and 24 years. Three major themes, connectedness, belonging, and social identity, were explored in relation to young people's mobile phone use. Easy contact with others when using a mobile phone facilitated connectedness between people. A need to remain connected emerged in participants' descriptions of their mobile phone use. Consequently, data were analysed for factors underpinning people's desire to be connected. It emerged that mobile phones were used to enhance feelings of belonging amongst youth. Additionally, group norms influenced mobile phone behaviour indicating that social identity processes are related to mobile phone use. Results in the study provide a foundation upon which to investigate further the relationship between mobile phone use and psychological factors impacting on young people's social development.

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In Australia, youth, aged 16 – 24 years, are recognised as the most prolific
users of mobile phones (e.g., Galaxy Research, 2004). As current youth are the first
generation to have grown up with mobile technology, they have incorporated the
device into their lives. Although the disadvantages of mobile phone use include cost
and contact at inappropriate times (Walsh & White, 2006), it is the psychological and
practical benefits of technologies which make users more likely to adopt them
(Ruggiero, 2000). Use increases over time as the benefits become more valued by the
user (Ruggiero). There are many acknowledged practical benefits from mobile phone
use, including convenience and ease of contact; use in emergency situations;
organisation of transport; and alleviating the need to locate public telephones (Leung
& Wei, 2000; Ling, 2004; Ozcan & Kocak, 2003; Walsh & White, 2006). Specific
psychological factors impacting on mobile phone use, however, are less understood.

Mobile phone use has been found to facilitate social inclusion and, thus, it
would be expected that socially disadvantaged people may use a mobile phone to
improve their connectedness to others (Wei & Lo, 2006). When testing this
hypothesis, however, Wei and Lo found that Taiwanese mobile phone users who were
shy and lonely used their phone at low levels whilst those who used their phone for
social motives, such as expressing affection (e.g., letting others know you care for
them) and social utility (e.g., relieving boredom), had higher levels of mobile phone
use. Although there may be cross-cultural differences between the participants in Wei
and Lo's study (Taiwanese) and the present research (Australians), their findings
suggest that it is extrinsic, rather than intrinsic, factors which influence mobile phone
use. Previous research, in Australia and overseas, has found that one of the primary

benefits of using a mobile phone is ease of contact with social networks (e.g., Mathews, 2004; Srivastava, 2005; Walsh & White, 2006). As social networks are particularly important for youth who are moving beyond the confines of family and school to form new relationships and social communities (Arnett, 2004; Smetana, Campione-Barr, & Metzger, 2006), it may be that social psychological influences are associated with mobile phone use amongst youth.

Two social psychological factors which enhance psychological well-being and development are belongingness (Baumeister & Leary, 1995) and social identification (Hogg & Abrams, 1988). This paper reports a qualitative exploration of how belongingness and social identity may relate to mobile phone use amongst youth. Use of a qualitative method allowed young people to express their thoughts and feelings regarding mobile phone use, subsequently providing their unique perspective on the relationship between mobile phone use and their social development. The combination of a qualitative research methodology and a social psychological framework to investigate mobile phone use amongst youth may serve to improve our understanding of social psychological factors influencing this behaviour.

Belongingness

Along with understanding, controlling, enhancing self, and trusting, belonging is posited to be one of the five core social motivations that underpins much social behaviour (Fiske, 2004). The belongingness hypothesis states that humans have a fundamental need to form strong stable relationships (Baumeister & Leary, 1995). As such, people are motivated to seek out frequent personal contacts and cultivate relationships which promote the formation and maintenance of social bonds. Feelings of connectedness and value to others arising from belonging increase self-esteem and enhance overall psychological adjustment. Low levels of belonging, however, result

in poor mental well-being and low self-esteem. As such, behaviours which promote feelings of belonging are highly valued (Baumeister & Leary).

Indications that the need to belong may be related to mobile phone use have emerged in recent studies. First, people with low self-esteem have been found to engage in excessive text messaging, possibly to feel part of a positive social group (Bianchi & Phillips, 2005). Second, exclusion from SMS conversations has resulted in lowered levels of belonging and self-esteem, with ostracised participants feeling angry about their non-inclusion in the SMS conversation (Smith & Williams, 2004). Additionally, young people who do not have a mobile phone report feeling excluded from friendship groups and social networks (Charlton, Panting, & Hannan, 2002; Mathews, 2004).

Previous research into people's use of communication technologies has revealed that people use these devices to initiate and maintain relationships. For instance, text messaging is used by young people for flirting and making initial contact with prospective relationship partners, as a message is viewed as less confrontational and threatening than face-to-face contact (Ben-Ze'ev, 2005). Additionally, electronic friendships, such as those formed by computer game players (Colwell, Grady, & Rhaiti, 1995), and on-line romantic relationships (Ben-Ze'ev) are valued by young people. Electronic relationships often supplement, rather than replace, traditional face to face friendships (Colwell et al.) providing an additional avenue of social connection for users of the technologies. Mobile phone use has been found to facilitate the formation and maintenance of both romantic (Ben-Ze'ev) and social relationships (Ling, 2004; Srivastava, 2005). Thus, the need to belong may motivate young people to use their mobile phone. Additionally, young people report that a primary benefit of mobile phone use is contact with friendship groups

(Mathews, 2004), indicating that social identification is linked to mobile phone use amongst this cohort.

Social Identity

Social identity theory is a general theory of group processes that has been drawn on to explain a range of phenomena including intergroup relations and intra-group behaviour (Hogg & Abrams, 1988; Turner, 1999). Within a social identity theory paradigm, the self is socially constructed with group memberships and the salience of shared intra-group characteristics influencing the individual's self-concept. In-group members are viewed more favourably than out-group members and people are motivated to act in a manner congruent with their chosen in-group to receive approval from group members. As such, perceived group norms become the reference point for beliefs, attitudes and behaviours as individuals seek to behave in a manner consistent with the relevant social group (Hogg & Abrams, Turner).

Whilst social identification is most effective under conditions when the group is present, the formation of a psychological sense of community, in which group members are linked by a psychological attachment (Obst & White, 2005), results in social identity being a significant behavioural influence when people are apart from the group (Ellemers, Spears, & Doosje, 2002). Internalisation of group norms from salient group memberships are most impactful on behaviour (White, Hogg, & Terry, 2002). Thus, members will feel motivated to engage in normative behaviours irrespective of whether the group is present or not.

The relationship between social identity influences and mobile phone use, however, remains unclear. Whilst prototypical images of mobile phone users have been found to influence young people's mobile phone use (Cassidy, 2006; Walsh & White, 2007), the role of group-based normative pressures on mobile phone use has

not been investigated. Given the high level of mobile phone use amongst youth in Australia and other nations (e.g., Green, 2003; Ling, 2004; Srivastava, 2005; Walsh & White, 2006), mobile phone use is arguably an intrinsic behaviour in young people's friendship groups. Additionally, previous research has shown that young people most commonly contact friends, rather than family or other groups, on their phones (Baron & Ling, 2007; Mathews, 2004) indicating that social identification processes are likely to be related to young people's mobile phone use.

The Current Research

In spite of the prevalence of mobile phone use amongst youth, there remains little psychological research that examines mobile phone use amongst this cohort. The majority of previous research has been conducted from a communication (e.g., Leung & Wei, 2000; Ozcan & Kocak, 2003) or sociological (e.g., Ling, 2000; Srivastava, 2005) perspective. Whilst these studies have provided important information about the reasons for adoption of the technology or the social implications of mobile phone use, they do not allow for understanding of psychological factors underpinning mobile phone use. Most of the research available in the psychological context are quantitative studies (e.g., Bianchi & Phillips, 2005; Mathews, 2004; Walsh & White, 2006). Whilst quantitative methods provide a broad-scale understanding of specific factors predicting a behaviour, quantitative research, in general, does not provide an enriched insight into how people understand their behaviour (Mitchell, 2004). In contrast, qualitative methods allow people's perspectives on the behaviour to be explored subsequently enhancing interpretation of behavioural influences (Strauss & Corbin, 1998).

In the present study, focus groups are used as the data collection method. Additionally, the study adopts an a priori analysis which seeks to identify themes on

the basis of established theory. Whilst there are alternative qualitative methods available, there are a number of reasons to support the use of our approach. First, although mobile phone use is a commonly performed behaviour, there is limited research investigating the psychological factors associated with this behaviour. Focus groups are a useful method to gain an in-depth exploration of a topic by allowing shared views to become apparent (Fern, 2001). In contrast to individual interviews in which people's ideas may be restricted, focus groups provide a socially interactive environment which facilitates a broader discussion of the topic (Greenbaum, 2000).

Additionally, focus groups allow for exploration of hypothesised links between established theories and new behaviours prior to developing larger scale studies (Fern, 2001). The present research sought to explore whether current theories are applicable to a new behaviour. It is hoped that the findings will provide the foundation for future discussion amongst researchers about which current theories can be utilised to best understand mobile phone use behaviour. Alternatively, it may be that new theoretical approaches are required.

As yet, few qualitative studies have explored psychological factors relating to mobile phone use. Thus, adoption of a qualitative approach, in this study, will give an initial insight into the psychological underpinnings of young mobile phone use amongst some young Australians. Given that mobile phone use is a highly social behaviour, the current research adopts a social psychological approach to explore the perspective of a group of young Australians regarding their mobile phone use.

Youth engage in the highest level of mobile phone use and are at a life-stage in which they are actively developing new relationships and communities (Arnett, 2004; Smetana et al., 2006). Thus, they provide a unique cohort for investigating social psychological factors that influence behaviour. The information obtained

during focus group discussions will improve our understanding of the interplay between social psychological factors and mobile phone use amongst Australian youth.

Method

Participants and Design

Six focus group sessions lasting approximately 1 hour each were conducted. Thirty-two participants (13 males, 19 females) aged between 16 and 25 years ($M =$ 19.59, $SD = 2.37$) were recruited by a snowballing method. Family, friends, and work colleagues of the first author emailed a description of the study and a request for participants to their social networks. Participants' occupations varied widely with students, hospitality workers, and professionals being included in the sample. The final focus group, conducted to confirm previous emerging themes and that theoretical saturation had been reached (Miles & Huberman, 1994), comprised first year psychology students.

Focus group size ranged from three to seven participants. Four groups were mixed gender, with the remaining two groups being females only or males only respectively. Groups were randomly constructed as participants chose which group to attend. In some groups, pairs of friends attended with the remainder of the group being individual attendees. The exception to this was the female only group who were students attending the same school. The only inclusion criterion for the study was that participants owned and used a mobile phone at least once per day. Length of mobile phone ownership ranged from 2 months to 8 years and level of use ranged from once per day to over 25 times a day within various groups. A range of mobile phone owners were included in every group. Participants were told that all opinions would be respected and were encouraged to contribute to the conversation, irrespective of their current level of mobile phone use.

Participants were entered into a draw to win a shopping voucher, with the exception of the final group (university students) who received partial course credit. It is acknowledged that different participation incentives and group composition may have impacted on results; however, the incentives were not emphasised during recruitment and the same procedure was used for each group providing a similar experience across the groups. Consistent with our belief that incentives and composition did not influence results, data analysis revealed similar themes irrespective of group composition or differences in incentives.

Materials

A discussion guide comprising open-ended questions was developed prior to the commencement of the focus groups (Silverman, 2005). Discussion topics included level and type of mobile phone use (e.g., What do you primarily use your mobile phone for?); outcomes of mobile phone use (e.g., What are the main benefits of using a mobile phone?); and mobile phone use amongst friendship groups (e.g., How is the mobile phone used amongst your friends?). During the data collection phase, questions were refined to allow for expansion on emerging concepts or to improve the moderators' understanding of some points.

Procedure

Approval to conduct the research was obtained from the Queensland University of Technology Human Research Ethics Committee (Approval number 600000319). Prior to commencement of each group, participants were provided with an information sheet outlining the study, the voluntary nature of their participation, and procedures to protect anonymity (such as removal of any names from transcripts). Written consent was obtained to audio-record discussions from all participants and parents of minor participants signed consent for their child to participate. Participants

were advised both verbally and in writing that, whilst their input was valued, they had the right to participate at their own level and that they could withdraw from the study at any stage without penalty. Participants were invited to be open and honest and were informed that there were no right or wrong answers.

The first author moderated the focus groups. Discussions were guided by focussing statements and semi-structured questions. Participants were encouraged to discuss each question amongst themselves with the moderator probing for clarification if required. To encourage contributions from participants, comments were validated by phrases such as, "thank you for that comment". The discussion was allowed to move beyond the specific topic raised in the focussing question to allow new concepts and themes to emerge.

At the conclusion of discussion on each question, member checking was conducted (Murphy & Dingwall, 2003). The moderator re-stated participants' general comments and provided a summary of the discussion. This process ensured that the moderator understood participants' perspectives and allowed participants to clarify or confirm any ambiguous points. Additionally, use of this strategy gave participants the opportunity to understand the researcher's interpretation of the conversation (Murphy & Dingwall).

Data Analysis

Audio-tapes were transcribed verbatim with the researcher noting common concepts across the groups. Following transcription, the first author used a qualitative data analysis program (NVivo) (QSR, 2002) to conduct thematic data analysis (Silverman, 2005). Data were initially coded into the broad categories of each focussing question. Each category was then analysed for evidence of the general concepts which the researcher had noted throughout the discussion and transcription

process. Concepts which arose frequently across categories and group sessions were coded and identified as themes. An iterative process was used with transcripts being coded and re-coded until no new themes emerged. The second author (who was not present during the discussions) reviewed the de-identified transcripts and commented on the relevance of the quotes chosen to illustrate the themes in the study.

Results

Throughout the discussions, it emerged that the primary benefit of mobile phone use was connectedness to others. Whilst mobile phones were used for practical reasons such as organising transport; planning social activities; and being contactable by employers; the word 'connect' was regularly used by participants when discussing their mobile phone use. For example:

It's definitely the connecting. Like if you just had a mobile phone that had the address book and you didn't connect, people would throw it away. (Male, 22).

The reason I like having my phone on me is so I can be connected to everyone. (Female, 20).

I use my phone to stay connected. If I haven't seen someone … I'll send them a message. (Male, 20).

It's a good way to connect cause she's really hopeless with mail and she doesn't write letters or anything like that, so I never get anything else unless it's on my phone. (Female, 22).

Thus, the ability to quickly and easily connect to family and friends was highly valued by participants. Additionally, the comments indicate it is

not only physical connection but the knowledge that you are psychologically connected with others via your mobile phone which is important.

Many participants described how they using their phone to remain in contact with people who were separated by distance. Previously, keeping in contact by telephone with family or friends who lived interstate was relatively expensive. Using a mobile phone to send and receive text messages, however, was believed to provide an inexpensive method of overcoming geographical boundaries when communicating. In the following quote, one participant describes how her family texts each other during televised football games, creating a shared experience even though they are separated by over 2000 kilometres:

> We've got family in South Australia who go for the Crows or Port [Australian Football League teams] and when we're playing them, we're always giving each other a hard time, bit of banter and messages, because even though they're two states away it's nice … (Female, 22)

Other participants discussed how they used their mobile phone to share experiences, such as concerts or news, with people who were not physically present. For instance:

> Last weekend, I was at a festival and my phone recorded some mini videos and I sent them to people I know who'd be interested (Male, 24).

> I've sent photos, when I went to concerts, to friends and you know they're missing out, and it's like yep, I'm here, I'm now, this is great. (Female, 18).

It depends how good it was and how many people I want to tell. If I

want to tell everyone, I'd just send a message to everyone. (Female,

20).

I had to tell a lot of people so I just messaged them because you can't

call them all. It also depends on who the person is, like if they're like

family, you'd call. (Female, 16).

These findings indicate that letting absent others know of current news

and activities is a regular and accepted part of youth culture.

Additionally, participants reported that they felt reassured when they

could quickly connect with others on their mobile phone:

It's like having your friends on standby. (Male, 20).

…you've got friends out there…someone's writing back. (Male, 22).

I think it's also the instant reaction, like, if you message someone and you

know a few seconds later you'll get a message back it's like, someone's there

talking to you, you are connected and they're there if you need them. (Female,

18).

The ability to be always in contact with others offered by mobile phones

influenced some young people's decision to leave their phones on at all times:

It's the anticipation that someone could (contact) you. You don't necessarily

expect it to happen but there's the chance and you don't want to miss out on it.

(Male, 19).

You always want to be contactable. (Female, 17).

Throughout the analysis, data were analysed for exceptions to connectedness

being a valued outcome of mobile phone use; however, no contradictory opinions

were revealed. Overall, it was revealed that the mobile phone is a vital tool for

facilitating physical and psychological connectedness amongst a cohort who are moving beyond the traditional confines of school and family life. Consequently, data were further analysed for factors underpinning participants' need to remain connected to others.

Belongingness

Throughout the discussions, the need to belong emerged as an important factor influencing young people's mobile phone use. To facilitate belonging, people seek out frequent contact with others to cultivate relationships (Baumeister & Leary, 1995). Youth, particularly, are maintaining current relationships whilst developing new relationships and expanding social networks (Arnett, 2004). Many participants described how they frequently contacted people on their phone, as illustrated in the following quotes:

> …when I'm bored sitting around at home on a Saturday night doing
> nothing, I'll just SMS everybody I know. (Male, 22).
> It might be just a stupid message, that doesn't have any point to it it's just to
> say I'm here. (Female, 17).
> I'll go through my phone book and see, oh I haven't spoken to him for a while,
> I can talk to him for free. I'll talk to him for 10 minutes just because I can, not
> even about anything. (Male, 20).

Whilst frequent contact, often for no particular reason, was a prevalent theme, a couple of participants indicated that they were more purposeful in their mobile phone use:

> I use mine mainly for functional reasons. If I want to catch up and
> make plans or if I'm on my way to see someone and running late to let
> them know, that type of thing. (Male, 24).

An interesting concept that emerged during the discussion was whether personal relationship status impacted on the reasons for using a phone. For instance, participants who had a partner believed they were less likely to use their phone to frequently contact a wider social group than people who did not have a regular partner:

> …because you become committed to one person, you either have a girlfriend or a partner or a wife, and you don't seem to have as much contact outside of those relationships except for maybe three or four friends …(Male, 22).

As only three participants in this sample indicated they were in stable relationships, this concept was not explored further.

During the discussions, participants routinely mentioned how using a mobile phone allowed them to remain close to people they valued when they were physically apart, subsequently enhancing belongingness. This concept is illustrated in the following quote, when a participant is describing why he uses his mobile phone at work:

> You always want to be in touch or like to be in touch with your friends. For me, like if I'm at work and I'm not around the people that I see frequently, I feel obviously more comfortable with them and sometimes I'll just get in touch with them for the hell of getting in touch with them because I am closer to them and because I'm away from them in a different environment. (Male, 20)

Thus, mobile phone use allows young people to maintain feelings of belonging when apart from those people who matter to them.

Belonging promotes self-esteem as people feel valued by others (Baumeister & Leary, 1995). Mobile phone use provided participants with a feeling of belonging and connectedness to others, consequently assisting psychological well-being. As two participants state:

> I think that most people want to feel loved really, deep down. They just like getting a call or getting a message. It might sound lame but I think that's why they like it. (Male, 21).

> When you get messages, nice messages, you feel loved. (Female, 17).

The value of the mobile phone to self-esteem is summarised by one participant's response to other group members' comments that she received a large number of mobile phone calls:

> What can I say, I'm just popular. (Female, 17).

Social Identity.

When social identity is salient, in-group norms become the reference point for much behaviour, particularly, if group membership is valued (Terry & Hogg, 1996). Mobile phone use enabled participants to be a part of their social group and was a normative behaviour of friendship groups, as shown below:

> We're all of a fairly impressionable age and demographic and we see all our friends with a phone so it's something we have to do as well. (Male, 20).

> About 3 years ago … all my friends were saying, you know, get a bloody phone... So I eventually buckled and got one. …and everyone was really proud of me when I got the phone. (Male, 22). [In response to the above comment, another participant in the group commented:] You know you've joined the club. (Female, 21).

Usually you're say with your friends and you've got your phone… but if you

don't have, like, have your friends, you have your phone, and then, like all of a

sudden, you're at work and you don't have your friends or your phone and

you're just like nothing. (Female, 17).

In addition to mobile phone use, in general, being an important part of group

behaviour, it emerged that participants' choice of carrier, level of use and type of use

was influenced by the norms of their friendship groups. For instance,

First I was on Telstra [telecommunications carrier] because that's what I was

given and then I changed to Optus [telecommunications carrier] because

everyone else was on Optus. (Female, 17).

On a weekend, that's half of my communication, other people asking me what

I'm doing. (Male, 20).

Everyone messages me, so I message back. (Female, 20).

Additionally, participants routinely discussed how responding quickly to

mobile contact was normative within their group of friends. Commonly, it was

believed that not responding quickly would result in disapproval from peers. Thus,

rather than having an explicit demand to respond when contacted, there was an

implicit assumption that reciprocal contact was expected, as illustrated in the

following quotes:

… I normally feel obliged to reply half the time because you know that they

know they've sent it to you and if you're good friends with them you don't

want to just seem like you're fobbing them off. (Female, 20).

It's also how other people would react. I mean if you didn't use your phone or

anything like that other people would be getting annoyed at you. It's just that

other people want to contact you and stuff like that…people want an instant

reply. People want to talk to you straight away and if you just don't do that then people aren't going to bother. (Male, 20).

At times, however, situational influences over-rode the impact of friendship groups norms. In the following quote, one participant describes how she resisted both implicit and explicit pressure to use her phone when she was in a situation where answering her phone would be inappropriate:

When we went out to dinner, a person was trying to call me and they called me about 20 times … It just felt rude because it was a friend but I didn't answer…and everyone's like, you're not answering your phone, wow, that's a big thing. You know, people think teenagers love their phone but when you're in situations like that, it feels awkward for you. (Female, 17).

It may also be that power issues are relevant in the above comment. For instance, whilst the channel for communication remained open (the norm amongst the friendship group); it was her personal choice to not answer the call.

According to social identity theory, in-group members are viewed more positively than out-group members (Hogg & Abrams, 1988; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Identification and categorisation processes were highlighted when participants were asked to consider if they knew anyone without a mobile phone. Participants stated that all of their friends and peers had a mobile phone. People of their own age who chose not to have a phone were seen as deviating from the accepted ingroup norms and as being outsiders who were viewed in a negative light as the following descriptions illustrate:

I'd be thinking what a loner. (Female, 17).

Losers. (Female, 16).

It makes them look antisocial… like they have no friends. (Male, 20)

One participant went so far as to ensure that other members of her friendship group, who were present in the focus group, were aware that she didn't associate with a particular person who didn't have a phone:

I don't understand why he doesn't. He's not my friend. (Female, 17).

Discussion

This study adopted a social psychological approach to examine factors relating to mobile phone use amongst Australian youth. Connectedness to others, the need to belong and social identification emerged as major social psychological themes relating to young people's mobile phone use.

Connectedness to others was revealed as a major benefit of mobile phone use. Barriers, such as geographical distance were overcome, and some mobile phone users reported they felt reassured by the knowledge that they were able to quickly contact other people on their mobile phone. Additionally, participants used their mobile phone to share experiences with distant others. Psychological connection, such as having friends on standby in spite of physical separation, emerged in participants' descriptions of the benefits of using a mobile phone. Remaining connected to others was a significant influence on many participants' decision to leave their mobile phone on at all times, indicating that some young people may have developed a need for constant connection. Consequently, data were analysed for factors influencing participants desire to remain continually contactable. The two major social psychological themes explored in relation to mobile phone use were *belongingness* and *social identification*.

The study provided support for the role of belongingness on mobile phone use. Consistent with the belongingness hypothesis (Baumeister &

Leary, 1995), participants frequently initiated contact with others to facilitate belonging. Belongingness enhances psychological well being as self-esteem is increased when people feel loved or valued (Baumeister & Leary). Young people, in particular, use approval from others to enhance their self-esteem (Rosenberg, 1965). The value of mobile phone use to young people's self-esteem was revealed when participants indicated feeling loved, valued, and popular, when contacted on their mobile phone. Thus, positive psychological outcomes, resulted when belongingness needs were met by mobile phone use. It may be that people with a strong need to belong or low self-esteem use their mobile phone to fulfil these needs, subsequently enhancing their psychological well-being.

Previous quantitative research has revealed that ostracism and exclusion from text messaging reduces belonging (Smith & Williams, 2004); however, this theme did not emerge in this study. As participants in this study were regular mobile phone users (using their phone at least once per day) the potential for mobile phone exclusion to be discussed may have been reduced. Additionally, the use of focus groups, in this study, may not have provided an appropriate context for participants to discuss ostracism and exclusion as peers were present in the groups. Future research, using individual interviews, may prove useful in exploring the effect that mobile phone exclusion has on belongingness and subsequent psychological well-being amongst youth. We suggest that such research could complement our current research and further our understanding of factors underpinning the decision to own and use a mobile phone. Overall, however, results in this study indicate that a need to belong impacts on mobile phone use amongst a cohort who value friendship and social groups (Arnett, 2004).

Social influences are highly impactful on young people who adopt the norms of the group as guidelines for behaviour (Smetana et al., 2006; Terry & Hogg, 1996). Similar to other research in which implicit and explicit normative pressure from friends and peers influence behaviour (Hopkins, 1994), there was evidence that social identification processes are at play in the context of young people's mobile phone use. Explicit and implicit normative pressure to conform to ingroup norms about mobile phone use was perceived by participants. Explicit normative pressure emerged as influencing young people's decisions to purchase and use a mobile phone. Throughout the discussions, participants indicated reciprocal contact was normative within their friendship groups and not responding to contact on your mobile phone was viewed negatively. Thus, participants felt implicit pressure to use their phone. There were times, however, that contextual influences were more important than conforming to friendship group norms about mobile phone use. For instance, when describing not answering her phone in a restaurant because she felt it was awkward, one participant indicates that there was an expectation from others around her that she would answer the phone. This statement may also reflect an instance when individual power over-rides the influence of group norms. Nevertheless, these results suggest that ingroup norms are highly influential for mobile phone use and norms about appropriate and inappropriate behaviour are still developing.

Consistent with social identity theory, in which in-groups are viewed more favourably than out-groups (Hogg & Abrams, 1988), people who did not own a mobile phone were perceived in a negative light. Thus, it appears that non-mobile phone owners can comprise an out-group whilst owning a mobile phone confers in-group status. This idea is reinforced by participants identifying that owning a mobile phone means you are part of the club. Overall, results in this study show strong

support for the role of social identification processes in mobile phone use amongst youth. Group-based norms impacted upon individual group members' mobile phone use behaviour and the simple act of owning a mobile phone facilitated the membership of valued social groups.

The findings that belongingness and social identification are related to mobile phone use reveal the importance of these two constructs to young people's social development. First, young people are at an age where they are developing a sense of identity outside the immediate family environment (Smetana et al., 2006). Thus, rather than seeking to belong to a family network, young people rely on friends and peers to provide a sense of community and connection (Smetana et al.). As such, belongingness needs in young people may be more likely to result in a strong social identification with friendship groups. Results in this study reveal that belongingness motives were related to frequent mobile phone use amongst young people. Additionally, mobile phone use enabled young people to feel they belonged to their wider social network, potentially enhancing their social identification. Mobile phone use was a normative behaviour amongst friendship networks influencing level and type of use. Thus, the role of social psychological factors is an important consideration when seeking to understand young people's use of communication technologies.

Limitations

There are some key limitations in this study which may have impacted on results. First, participants in the study were drawn from an urban community. As such, the factors influencing their use of mobile technology may differ to rural communities which are more geographically fragmented. Additionally, within Australia, many rural communities have poor mobile phone coverage limiting the use

of mobiles in these areas (Allen Consulting Group, 2005). Thus, it may be that the relationship between mobile phone use, belongingness, and social identification processes, will be different amongst rural mobile phone users.

Second, participants in the study were all mobile phone users with groups comprising a mixture of people with differing levels of use. Although measures were taken to facilitate open discussion amongst group members, it may be that people who used their phone more or less than the majority of group members did not fully share their opinion. Future research could allocate participants to groups according to their level of mobile phone use so that comparative analyses could be conducted between user groups. Additionally, inclusion of a group of non-mobile phone users would allow for an exploration of psychological differences between people who use a mobile phone and those who do not, which may provide insight into another ingroup/outgroup dichotomy in this area.

Finally, pre-existing theories were used to understand the findings of this study, potentially limiting the interpretation of results. Whilst belongingness (Baumeister & Leary, 1995) and social identification (Turner et al., 1987) emerged as being related to mobile phone use, a grounded theory approach (see Strauss & Corbin, 1998) may allow for development of new theories specifically relating to mobile phone use to be established. Alternatively, it may emerge that other established social psychological theories could explain psychological factors relating to young people's mobile phone use. For instance, the ability to be connected without a face-to-face presence may be understood by optimal distinctiveness theory (ODT, Brewer, 1991) in which people seek to fit into a group whilst standing out from the group. Future research could investigate the utility of alternate theories in explaining mobile phone use amongst youth. In spite of the limitations of this study, the research provided an

initial understanding of how belonging and social identity impact on young people's

mobile phone use and signalled a number of directions for future research.

Future Research

This study provided a preliminary understanding of young adults' perspectives

on social psychological factors influencing their mobile phone use. Given that the

need to belong and social identity factors emerged as motivations for young people's

mobile phone use, a quantitative study could investigate the relative impact of these

two constructs on level of mobile phone use and patterns of mobile phone behaviour.

It may be that people who have a high need for belonging or a strong social

identification with specific referent groups where mobile phone use is valued are

more likely to engage in high level or excessive use and particular patterns of use.

As belongingness and social identification were associated with mobile phone

use, further research could seek to identify the interplay between these two constructs

in linking group process factors to mobile phone behaviour amongst social networks.

Additionally, future research could examine the extent to which alternate theories,

such as ODT (Brewer, 1991), apply to mobile phone use. It may be that the

dialectical motives posited by ODT explain some of the contradictory findings in

mobile phone research, such as why many young people personalise their mobile

phones (Katz & Sugiyama, 2005) (potentially a stand out motive) when mobile phone

use is an intrinsic part of group behaviour (a fit in motive). As belongingness motives

influence people's perception of their group memberships (Gardner, Pickett, &

Brewer, 2007), future research could investigate the relationship between these two

constructs in the context of mobile phone use.

Finally, two issues that were unable to be fully explored in this study,

relationship status and personal power, may also warrant further investigation.

Future research could investigate whether belongingness and social identification changes throughout the period of young adulthood. For instance, a participant in this study commented that he is less likely to use his phone to contact a wide circle of friends as he has a partner. It may be that, as relationships become more stable, the need to belong is met by one person and social identification becomes less influential on behaviours such as mobile phone use. Additionally, results suggest that there are times when young people choose not to answer their phone in spite of normative pressure to do so. Further research into when personal power over-rides established ingroup norms in the context of mobile phone use, may inform the relationship between self and social identification factors.

In conclusion, this study adds to the growing body of research investigating psychological factors underpinning mobile phone use. In particular, the present research provides insight about how social psychological factors influence mobile phone use amongst Australian youth and provides a foundation for further research in this area. Use of a qualitative approach provided a rich description of young people's mobile phone use so that the perspectives of young mobile phone users could be explored. Young people value being constantly connected to others via their mobile phone with the need to belong and social identity processes being related to young people's mobile phone use. Future research should investigate the relationship between belongingness and social identity factors as they relate to mobile phone use to improve understanding of the interplay between these constructs. Overall, the information gained in this exploration of mobile phone use amongst Australian youth assists in our understanding of how young people use communication technologies to facilitate their social connection.

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