

The Portable Music Player as a Defense Mechanism

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A survey of iPod-related blogs and university students was performed in the fall of 2007 to test whether an iPod defense mechanism existed. Respondents were asked how they would react, in terms of their iPods and earbuds, if approached by someone that interested them, somewhat interested them or did not interest them. Results suggested that respondents reacted differently the less the approaching person interested them, signifying a defensive mechanism somewhat akin to that employed by cellular phone users.

Literature Review

According to Apple's January, 2008 quarterly report, the company sold over 22 million iPods the previous year (Apple, 2008). Since the iPod's launch in October of 2001 over 141 million iPods have been sold internationally (Collins, 2006; Kahney, 2006). While this has created record profits for Apple, it has also created an impact upon society. It has become commonplace to see people, seemingly oblivious to their surroundings, with wires dangling from their ears.

The concept of using an iPod to shut out the world has been praised, demeaned, and warned against. *Macworld's* Michael Goldberg (2005) suggests that in today's technology-driven world, we need to sometimes isolate, or cocoon, ourselves in order to gain peace, even from family and friends. He writes that the iPod does just that.

Writer for *The Futurist*, Alper Alsan (2008), disagrees suggesting that young people have taken the concept of closing themselves off from society too far and that they should be instructed to at least take the earbuds, the small earphones that come with the iPods, out of their ears when being spoken to. Other business authors

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agree. Olivia Barker (2005) and Peter Coffee (2004) both suggest that offices need to create and enforce rules that deal specifically with how employees are allowed to use iPods at work. Both authors state that it is a simple matter of business etiquette.

The concerns over iPod and earbud usage have even caused some authors to warn against using them for isolation as it could be dangerous. *Men's Health* author Steve Calechman (2008) asks his readers to make a New Year's resolution to exercise without earbuds to cut down on the number of accidents caused by athletes who are failing to pay attention to the world around them. *Skiing Magazine* author Rob Story (2007) suggests that the number one hazard on the slopes are people that are skiing "deaf" because of their earbuds and their iPod.

It seems that it may not be the iPod itself that is causing people to close themselves off from society. The iPod can be played numerous ways; through speakers, docking systems and automobile stereos to name just a few. The items that are closing people off from society may be the earbuds themselves.

Earbuds are bundled with every iPod sold and featured prominently in iPod marketing showing the consumer how to use the product often displaying the wires dangling loosely from the ears. What sets earbuds apart from traditional headphones is that headphones sit over or around the ear whereas earbuds fit down inside the ear canal (Miller, 1985). This not only delivers sound but also better blocks ambient sound better isolating the wearer from the sounds around him or her. Furthermore, since the earbud is inside of the ear, excess sound has nowhere to dissipate as when using traditional earphones so ear damage is of greater concern (Ringin, 2005).

Those who warn against using the iPod as a cocooning device may have a point. The use of the earbuds for extended periods of time listening to loud music are leading to a condition coming to be known as iPod Ear (Harvard Men's Health Watch, 2007) or iPod Deafness (PC Magazine, 2007). It is suggested that if present trends continue, up to 28 million Americans could have substantial hearing loss as a result.

Potential physical harm and rudeness aside, the concept of using technology to separate one's self from the rest of society is not a new concept. The earliest isolated form may be traced back to a Welsh academic named Raymond Williams (1974) and his book *Television: Technology and Cultural Form*. Williams theorized that through live television, it was now possible for a viewer to isolate him or herself within a living room, and have mobility through being a viewer. Even though the person's physical space was growing smaller through cocooning, the technology that was within the cocoon seemingly allowed the viewer the ability to travel to any location displayed on the screen. There was no need to physically go anywhere. The television would take the viewer, or at least show the viewer, the world. Williams called this form of travel "mobile privatization." If memories are what are left after travel, then it might be suggested that someone who watched a travel show may have the same pleasant feelings one year out as someone who actually made the trip. Even moving from city to city, a person could create a new cocoon, a dwelling, relatively equal to the one he or she just left and quickly reestablish a life fairly equal

to the one he or she just left. Reality was what was shown to, and created by, the user rather than what was surrounding the user.

Researchers continued to look into this idea of technology in the household being able to transport people, known as spacedisembeddedness versus space-re-embeddedness to wherever the media was showing them (Higgins, 2000, Moores, 1996, Yu, 2006). For example, Joshua Meyrowitz (1985) reaffirms the concept of mobile privatization in his book *No Sense of Place* expanding the concept to state that the media may go as far as to create new social situations that have nothing to do with who is around us but rather are shaped by what we see on television. Reality may actually be superseded. This goes to language and how we carry ourselves. Many of the social lines that society once kept are now blurred because people are gathering their information through the media rather than through real life experiences. For many, it would seem, Meyrowitz suggests, the television has become their real life.

In each of the above cases, the viewer remains stationary and the perceived world comes to them, but what if the viewer could move about taking their perceived, or virtual, world with them? In her book *Welcome to the Dreamhouse*, Lynn Spigel (2001) suggested that in the 1960s a new line of indoor/outdoor products including mobile homes and portable televisions allowed persons to take their homes, their belongings and their television viewing out into the world. Speigel believed this advancement turned Williams' theory upside down so she named her observation "privatized mobility."

The concept of privatized mobility, the ability to take your world with you, became far less bulky in 1979 when SONY released the first portable music player, the Walkman (Hornby, 2006; Spigel, 2004). Now a person had a distinct advantage over someone who was relying on the television to bring a reality into a home. A SONY Walkman allowed the user to record a cassette tape of his or her choice, put on headphones, and move about freely. Research suggested that Walkman users did this for two reasons; escaping the outside world and life enhancement through a soundtrack, helping to change perspective (Levy, 2006).

What sets the Walkman user apart from the television viewer is that the Walkman user has infinite control over what he or she is presented with. A television viewer has a limited number of choices, even if given cable or satellite television whereas a Walkman, or now iPod or iPhone user, has a literally unlimited number of choices with which to begin changing or reshaping their opinion of the world around them.

Yet another piece of technology emerged in the mid 1980s that allowed a person to further create a reality around him or herself. The cellular phone doesn't use traditional headphones, earbuds or a confined space as the technologies noted above but what the cellular phone does is allow users to push away the people around them and bring their own friends into their reality.

Troester and Mester (2007) suggest that users employ this schizophrenic characteristic of the cellular phone to have an interpersonal conversation with someone conceivably miles away while they are surrounded by a whole other reality. The ability of a cell phone user to not only incorporate a new reality—complete with

a second or third human being—can literally wrap the user, *Telecoon* as Habuchi (2005) puts it, in a formulated reality. This cellular reality is so removed from the present society that even the basic rules of etiquette don't apply. Verschueren (2005) refers to this as the cell phone user's *alternative space*.

Rosen (2004) suggests that cellular phone users hear both sides of a conversation that the public surrounding them does not and thus they are given the illusion that they are alone. It may be one reason why cellular phone users are so apt to offer embarrassing information or speak loudly, often offending the people around them. The surrounding people are not part of the cellular phone user's created reality (Wallis, 2006). Those that bring the cellular phone user's rudeness to their attention are often given dirty looks as the cellular user does not see him or herself as being part of the present collective society. Sturken (2004) suggests that when a cellular phone user is on the phone it is that phone-based reality that takes precedence. Persons who interrupt that reality are being rude in the cell phone user's opinion.

The phenomenon has become so well known that the society that surrounds the cell phone user often does not approach and point out rude behavior. Even though the cellular phone user is being rude, the society does not want to be even ruder and interrupt. We simply and quietly put up with it (Anderberg, 2003). Cellular phone users know this and will often use their phone in order to not be approached, to be left alone. General society wanting to not approach a cellular phone user who is in his or her absent presence has led to persons using their phones as a kind of protection.

In the 1970s, those in their living room didn't need to fend off approaching people. Persons using SONY Walkmans could avoid eye contact altogether and fairly easily move through society without causing much attention. Cellular phone users are quite the opposite. They are in society without any headphone cocoon. They bring to society their own world but, unlike their technological predecessors, expect those around them to accept their conversations and not intrude upon their personal reality. It's a passive-aggressive force that infringes on the members of the society that the cellular phone user did not bring along (Carter, 2006; Rosen, 2004).

The force of a so-called rude cellular phone user is so strong that research is suggesting that society is allowing the cellular phone user's virtual reality to be the dominant reality. Places where making cellular calls were once disallowed are now more and more becoming acceptable. Moreover, less and less people are willing to say anything to a person who is rudely using a phone around them (Glotz & Bertschi, 2006).

It should be pointed out that even though such behavior generally can be termed rude, Plant (2002) points out that many female cellular phone users see their phones and this type of behavior as protection. Many women feel that their phone brings with it a sense of security and what Plant terms a "phone shield" than can be used to deter unwanted advancements. A woman can simply make a phone call and retreat into her virtual reality and into some form of relative, or perceived, safety when she wants.

In 2001, Apple brought the iPod into the market and users quickly adopted it in record numbers. Many of these users employed the earbuds to shut themselves off from society, and presumably, create their own life soundtrack much like the SONY Walkman before. In his book *The Perfect Thing: How the iPod Shuffles Commerce, Culture, and Coolness*, Steven Levy (2007) gives yet another name to the world a piece of technology creates for the user, "portable alternative reality."

The difference now is that two of the technologies exist at the same time. Moreover, most users would own two of the technologies concurrently: an iPod and a cellular phone. At the time of this writing, the iPhone has come out, but sales had not yet come close to eclipsing the iPods and cellular phones that were already in the marketplace.

Since both of the technologies had reality variables surrounding them, the question could be asked, "Would one influence the other?" Would a person use a portable music player as a defense mechanism in the same way that cellular phone have been used?

Levy (2006) suggested that SONY Walkman users created a reality soundtrack for themselves bettering their lives while separating themselves from society. Plant (2002) suggested that cellular phone users create a shield for themselves using their phones. Since a current user could, at one time, have both an iPod and cellular phone, it would seem that that user would know the concepts.

It would be absurd to suggest that a person listening to an iPod would pull out a cellular phone when approached by a person he or she didn't want to talk to. That would mean pulling out the earbuds and giving the approaching person an easier chance at breaking the virtual reality and making contact.

However, in order to test such a defense mechanism with an iPod, or any portable music player, it wouldn't be the music player alone that would be tested but rather the test would be in tandem with the technology that delivers the music, the earphones or more likely in today's technology market, the earbuds. The earbuds are the equipment that delivers the sound and, as suggested earlier, best allows the user to block out the world around him or her. In fact, some earbuds are marketed specifically for their ability to block the sounds of the outside world (Bose, 2008). However, the player itself cannot be ignored totally. It does deliver the sound level and may come into play.

If there is a defense mechanism at work, logically the user would mainly employ the earbuds to keep the approaching person at bay. Cahill (2005) wrote he knew of students that put their earbuds in immediately after classes in order to avoid having to talk to people they barely knew. Would that translate to using the earbuds as a defense mechanism against people the user simply disliked?

Using the popular iPod as a default portable music player, the previous review gives support to the following research question:

RQ₁: Will iPod users react differently, in regards to their earbuds and iPods, depending on their interest in the person approaching them, suggesting a defense mechanism?

Method

During the fall of 2007 an online survey requesting information regarding how users interacted with their iPods was created and posted to an educational Website. Inside of the 35 question survey were three questions geared to measure how respondents would interact with their iPods when approached. The three questions were:

1. When I am wearing my iPod and I am approached by someone who interests me, I:
2. When I am wearing my iPod and I am approached by someone who somewhat interests me, I:
3. When I am wearing my iPod and I am approached by someone who does not interest me, I:

The term “interest” was used because it was broad enough that participants could make of it what they wished. Participants were allowed to denote for themselves what they felt an “interest” in a person would be. The researchers felt that using a more restrictive term such as “frightens” or “concerns” might sway the results. “Interest,” the researchers felt, was benign.

Each question was in a multiple-choice format with the following options. Note each option becomes less inviting to the approaching person:

- Shut off the iPod—no earbuds in ears
- Leave iPod on—no earbuds in ears
- Leave iPod on—one earbud out
- Shut iPod off—earbuds in
- None of the above
- No Answer

A link to the survey was posted on a professional listserv. In addition, the survey link was sent out via e-mail to classes at a Southern state university requesting that students that possess and use an iPod regularly take the survey.

Results

The survey resulted in 322 viable responses, however each respondent was not required to answer every question.

Question one which asked about being approached by someone the respondent was interested in received 293 responses.

Question two which asked about being approached by someone the respondent was somewhat interested in received 290 responses.

Question three which asked about being approached by someone the respondent was not interested in received 291 responses.

The ages of the participants skewed heavily 18 to 29, making up 81% of those that answers the three questions. The youngest age was 18 simply because participants were required to be 18 in order to participate in the survey. Persons in their 30s made up 11%. Persons in their 40s made up 5% of the participants and persons in their 50s made up 3%.

The sample of participants that answered the three questions leaned heavily towards women. The three questions were answers by 182, 179 and 180 women respectively. All three questions were answered by 111 men each.

Table 1 is presented separating out the two responses *None of the Above* and *No Answer Given* in order to show a trend within the four responses dealing with the iPod and the earbuds. Note that when approached by a person who interests them, respondents appear to be far more likely to shut off the iPod and take out their earbuds. Moving across the row, the number diminishes as the respondent is less interested. As you move diagonally, away from more inviting actions towards less inviting actions, across the data from the top left to the lower right corner, there appears to be a trend that respondents do use their iPod and earbuds as a mechanism to ward off people they are not interested in. The line of data "Shut off—buds in" is not only the polar opposite of the line of data "Shut off—no buds," but it appears to be a stronger statement as well leaning much heavier in the "Does Not Interest" column when compared to the percentages of datum that came before it.

The raw data appears to suggest that a conscious effort is being made on the part of the participants to use their iPods and earbuds to shield themselves from persons they have little or no interest in.

Table 1
Frequency Distributions for the Three Questions Regarding Being
Approached by Someone Who Interests You, Somewhat Interests You
and Does Not Interest You

	Interests Me	Somewhat Interests	Does Not Interest
Shut off—no buds	124	64	33
Leave on—no buds	98	81	31
Leave on—one bud out	37	91	76
Shut off—buds in	8	16	90
None of the above	21	30	28
No Answer given	5	8	33
Total	293	290	291

Table 2 lends further credence that there is a conscious defense mechanism at work.

Remember that the options to choose from were less inviting to the approaching person as you moved down the choices. As you move across the table, the mean and median grow in number, thus the choices are moving down the scale or becoming less inviting.

The standard deviation and variance are widening as well, but only slightly, moving across the table suggesting that this defense mechanism may not be an universal effort.

Revisiting Table 1 shows that as respondents were approached by people that somewhat interested them or did not interested them, many of the iPod users opted to not answer the questions. The "No Answer Given" response grew by 5, 8, and 33 respectively. It may be that some people would not use their iPod and earbuds as a defense mechanism but rather avoid the situation by having no contact at all with the approaching person and the standard deviation and variance above are suggesting that.

Table 3 shows a significant difference among the three sets of data suggesting that the independent variable, the interest of the person possessing the iPod is having an effect upon the dependent variable, the action of that same person. The sample suggests, for this group at least, that a defense mechanism is present.

However, to this point, the sample has been looked at as a whole, taking male and female iPod uses as a group. Would there be a difference if the two genders were looked at separately?

Table 4 displays female respondents alone. The Pearson correlations remained significant at the .001 level one-tailed almost equaling the overall sample in results. There appears to be a conscious defense mechanism in the female group.

Table 5 displays the male respondents alone and provides similar results, significant Pearson correlations at the .001 level, one-tailed. However, the male results were lower correlation numbers overall, suggesting that they may have been a little less cohesive than the female sample, but significant nonetheless.

Table 2
Mean, Median, Standard Deviation and Variance for the Three Questions
Regarding Being Approached By Someone Who Interests You,
Somewhat Interests You and Does Not Interest You

	Interests Me	Somewhat Interests	Does Not Interest
Mean	2.04	2.62	3.51
Median	2.00	2.50	4.00
Std. Deviation	1.257	1.321	1.422
Variance	1.581	1.744	2.023

Table 3
Pearson Correlation (One-Tailed) Between the Three Questions
Regarding Being Approached By Someone Who Interests You,
Somewhat Interests You and Does Not Interest You

		Interests	Somewhat	Does Not
Interests Me	Pearson Correlation	1	.510(**)	.312(**)
	Sig. (1-tailed)	.000	.000	
	N	293	290	291
Somewhat Interests	Pearson Correlation	.510(**)	1	.476(**)
	Sig. (1-tailed)	.000		.000
	N	290	290	289
Does Not Interest	Pearson Correlation	.312(**)	.476(**)	1
	Sig. (1-tailed)	.000	.000	
	N	291	289	291

Note: (**) Correlation is significant at the .001 level one-tailed.

Discussion

Since the 1970s, researchers have been aware of, and have been studying, the effects of technology cocooning people in our homes and in public. That cocoon, or “reality,” can shut us off from the remainder of the world, yet it can allow us to go anywhere we choose. Technology, like portable music players, can enhance our lives bettering what is around us through adding a soundtrack or giving us a better feeling through what we’re hearing. The virtual reality can even give us

Table 4
Pearson Correlation (One-Tailed) Between the Three Questions Regarding
Being Approached by Someone Who Interests You, Somewhat Interests You
and Does Not Interest You—Female Respondents Only

		Interests	Somewhat	Does Not
Interests Me	Pearson Correlation	1	.558(**)	.330(**)
	Sig. (1-tailed)		.000	.000
	N	182	179	180
Somewhat Interests	Pearson Correlation	.558(**)	1	.498(**)
	Sig. (1-tailed)	.000		.000
	N	179	179	179
Does Not Interest	Pearson Correlation	.330(**)	.498(**)	1
	Sig. (1-tailed)	.000	.000	
	N	180	178	180

Note: (**) Correlation is significant at the .001 level one-tailed.

Table 5
Pearson Correlation (One-Tailed) Between the Three Questions Regarding Being Approached By Someone Who Interests You, Somewhat Interests You and Does Not Interest You—Male Respondents Only

		Interests	Somewhat	Does Not
Interests Me	Pearson Correlation	1	.426(**)	.273(**)
	Sig. (1-tailed)		.000	.002
	N	111	111	111
Somewhat Interests	Pearson Correlation	.426(**)	1	.442(**)
	Sig. (1-tailed)	.000		.000
	N	111	111	111
Does Not Interest	Pearson Correlation	.273(**)	.442(**)	1
	Sig. (1-tailed)	.002	.000	
	N	111	111	111

Note: (**) Correlation is significant at the .001 level one-tailed.

a sense of protection. As Plant (2002) wrote, cellular phones make many people feel safe. Simply having the device at hand makes it seem as if an entire army of safety personnel are at the ready to be there if needed. Moreover, Plant describes a phenomenon he calls the “phone shield” where people, especially women, are able to use the cellular phone to ward off unwanted people and isolate themselves in situations where they don’t want to be bothered.

Now that the Walkman style technology is available through the iPod and the cellular phone shield is known, would users begin using their iPod reality as a shield? As the research question earlier in this paper asked:

RQ₁: Will iPod users will react differently, in regards to their earbuds and iPods, depending on their interest in the person approaching them suggesting a defense mechanism.

The results of this study suggest the answer is that there is a defense mechanism through the iPod and the earbuds. When given a set of circumstances, the respondents in this study chose to use their iPods and their earbuds to shield themselves against unwanted attention much in the same way Plant suggested cellular phone users do.

Results suggested that when approached by a person who interested them, respondents were most likely to both remove their earbuds and turn off their iPod. The second choice was to remove the earbuds yet leave the iPod on. Both were inviting gestures. Only eight people suggested they would leave their earbuds in when approached by someone they were interested in. These answers may be chalked up to the iPod and the earbuds becoming more and more accepted by youth in today’s society.

When approached by someone who somewhat interested them, the respondents moved closer to putting up a shield. The number one answer was to only take out a single earbud yet keep the iPod running. That would send a clear message to an approaching person that they were only equal to what was being listened to at the time, but certainly not more important.

The results when approached by a person the respondent had no interest in were the most telling. While not quite an inverse of the results when being approached by someone they were interested in, the results were certainly different. The most selected answer was to leave the earbuds in. The next was to leave the iPod on and take only one earbud out. That seems a clear message to the approaching person that he or she is not welcome.

What may have been even more telling is that when approached by someone who did not interest them, respondents chose to not answer the question 11% of the time. That suggests that many of the respondents might not use the iPod as a defense mechanism but rather avoid the person altogether possibly by removing themselves from the situation.

While Plant suggested the phone shield was something given over to mostly a female audience, this study found that both males and females reacted equally when given the same set of circumstances. There was a slight difference in the range of answers the male respondents gave but not so much that it could be said that they differed from the female group significantly. Both males and females appear to use their iPods as a defense mechanism in the same fashion.

Alper Alsan (2008) wrote that one of the tips that young people today should be taught is to take out their earbuds when conversing. What Alsan may be missing is that the young people he is talking to may not be rude at all. They simply may find him of no interest. This is not to state that being rude is now acceptable. It is pointing out that what a previous generation sees as simple rudeness may now be a technology being used a form of protection, even if that protection is simply attempting to keep a perceived boring, uninteresting person at bay.

Conclusions

This study did find a defense mechanism used by both male and female respondents through their iPods and earbuds when approached by people in which they found little or no interest. Where the study fell short was seemingly not offering enough choices as many respondents chose to not answer the question about being confronted by someone who did not interest them.

This study does raise the concern of how we, as a society, are going allow technology to cocoon us. If, as the study suggests, there is a defense mechanism at play, then there must be a large enough section of society that wants or needs to be insulated, shutting themselves off from other people except for a chosen few whom they stay in touch with through technology. The mobile privatization Raymond Williams (1974) described in the mid 70s is now becoming a series of

realities. Users can cocoon themselves and “travel” without leaving their home. Portable music players can alter realities by adding soundtracks. Cellular phones can create mobile societies and “absent-presence” people. More and more with the convergence of media and technology, single, hand-held devices can offer all three and also, as suggested above, also offer some level of perceived defense.

It is a concern that technology has given us the ability to alter our reality into a simple picture for a life soundtrack. It is also alarming that it is easier and more comfortable to talk to a person miles away than it is the person sitting next to you. It is even further concerning that people see the same technology as useful for keeping the person sitting next to them from taking to them.

If users bring their realities and their societies with them in order to protect themselves from the society that surrounds them, do we truly have a society as all?

The study should be performed again widening the scope of the idea now that a defense mechanism has been established to obtain more detailed ideas about how people react in both mundane and more severe cases. The survey should also be redone to include any future technological updates, specifically convergent technologies, including Apple’s new iPhone, earphones and earbuds.

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